

LCH Limited

Zurich, February 20, 2020

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Ladies and Gentlemen

LCH Limited – Opinion on LCH Opinion Documents

You, LCH Limited ("**LCH**"), have instructed us to give a legal opinion under the laws of Switzerland ("**Switzerland**" or "**this jurisdiction**") ("**Opinion**") with respect to the enforceability of certain Arrangements under the LCH Agreements upon a Relevant Clearing Member's default or insolvency.

1. Terms of Reference and Definitions

1.1. Scope of Opinion Documents

For purposes of this Opinion we have reviewed and relied solely on the following documents: 1

- (a) LCH Rulebook as retrieved under <https://www.lch.com/resources/rules-and-regulations/ltd-rulebooks> including the General Regulations (Version of February 6, 2020), the Default Rules (Version of February 3, 2020) and the Settlement Finality Regulations (Version of December 10, 2019) ("**LCH Rulebook**"); 2
- (b) Form of Clearing Membership Agreement (as attached as Annex 1 to this Opinion) ("**Clearing Membership Agreement**"); 3
- (c) Form of Deed of Charge (as attached as Annex 2 to this Opinion) ("**Deed of Charge**"); and 4
- (d) Form of Security Deed (as attached as Annex 3 to this Opinion) ("**Security Deed**"), 5
(each individually and together a "**LCH Agreement[s]**"). 6

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1.2. Scope of LCH Services Covered

This Opinion covers the following services provided by LCH (the "LCH Services"):	7
(a) RepoClear Service;	8
(b) SwapClear Service;	9
(c) EquityClear Service;	10
(d) ForexClear Service; and	11
(e) Listed Interest Rates Service.	12

1.3. Scope of Relevant Clearing Members

This Opinion is given in respect of the following clearing members (" Relevant Clearing Members ") only:	13
(a) a corporation incorporated under the Swiss Code of Obligations (" CO ") ¹ and having its registered seat in Switzerland. For the purposes of this legal opinion, corporations include (a) joint stock corporations (<i>Aktiengesellschaft/société anonyme</i>) subject to Art. 620 et seq. CO, (b) companies with unlimited partners (<i>Kommanditaktiengesellschaft/société en commandite par actions</i>) subject to Art. 764 et seq. CO, (c) limited liability companies (<i>Gesellschaft mit beschränkter Haftung/société à responsabilité limitée</i>) subject to Art. 772 et seq. CO, and (d) cooperatives (<i>Genossenschaft/société coopérative</i>) subject to Art. 828 et seq. CO (" Corporation "), provided in each case that it is not a regulated Swiss entity supervised by the Swiss Financial Market Supervisory Authority (" FINMA ") and thereby subject to a particular insolvency regime;	14
(b) a banking institution licensed under the Swiss Federal Act on Banks and Savings Banks (" Banking Act ") ² , organized as a Corporation and having its registered seat in Switzerland (a " Bank "); and	15
(c) a securities house licensed under the Swiss Federal Act on Financial Institutions (" FinIA ") ³ (<i>Wertpapierhaus</i>), organized as a Corporation and having its registered seat in Switzerland (a " Securities House ") ⁴ .	16

¹ Schweizerisches Obligationenrecht (OR)/Loi fédérale complétant le Code civil suisse du 30 mars 1911 (CO), SR 220.

² Bundesgesetz über Banken und Sparkassen (BankG)/Loi fédérale sur les banques et les caisses d'épargne du 8 novembre 1934 (LB), SR 952.0

³ Bundesgesetz über die Finanzinstitute (FINIG)/Loi fédérale sur les établissements financiers du 15 juin 2018 (LEFin).

This Opinion is given with respect to the Relevant Clearing Members referred to above, but to the exclusion of any entities subject to public law, public utility companies and similar institutions and to the exclusion of Cantonal banks within the meaning of Art. 3a of the Banking Act, organized under private or public law. 17

1.4. Definitions and Rules of Interpretation

Terms used in this Opinion and not otherwise defined herein shall have the meanings ascribed to them in the LCH Agreements, unless the context specifies otherwise. 18

In addition, the following capitalized terms shall have the following meaning: 19

"**Arrangements**" means each and all of the Client Clearing Arrangements, the Collateral Arrangements and the Default Arrangements. 20

"**Cash**" has the meaning set forth under n. 248. 21

"**Client Clearing Arrangements**" means the provisions of the General Regulations (Version of February 6, 2020) of LCH including the Default Rules (Version of February 3, 2020) (and the Client Clearing Annex thereto) applicable to the Relevant Clearing Member in case of a default by the Relevant Clearing Member under the LCH Agreements. 22

"**Collateral**" means Cash and Securities. 23

"**Collateral Arrangements**" means the provisions (in particular Regulation 20) of the General Regulations (Version of February 6, 2020) of LCH and the Deed of Charge in respect of the providing of Collateral by the Relevant Clearing Member to LCH. 24

"**Default Arrangements**" means the provisions of the General Regulations (Version of February 6, 2020) of LCH including the Default Rules (Version of February 3, 2020) applicable in case of a default by the Relevant Clearing Member under the LCH Agreements. 25

"**Insolvency**" and "**Insolvency Proceedings**" shall be a reference to either a bankruptcy (*Konkurs/faillite*) and the adjudication thereof (*Konkursöffnung/ouverture de la faillite*) under the Swiss Federal Act on Debt Enforcement and Bankruptcy ("**SDEBA**")⁵, the grant of a moratorium (*Nachlassstundung/sursis concordataire*) with a view of entering into and the proceedings leading up to a composition agreement (*Nachlassvertrag/concordat*), or special insolvency measures in respect of Banks and Securities Houses, i.e. protective measures (*Schutzmassnahmen/mesures protectrices*), reorganization proceedings 26

⁴ This includes securities dealers (*Effekthändler*) that were until December 31, 2019 licensed under the Swiss Federal Act on Stock Exchanges and Securities Trading ("**SESTA**"). Such securities dealers are not required to obtain new licenses under the FinIA. Rather, their licenses granted under the SESTA will continue to be valid under the FinIA.

⁵ Bundesgesetz über Schuldbetreibung und Konkurs (SchKG)/Loi fédérale sur la poursuite pour dettes et la faillite du 11 avril 1889 (LP), SR 281.1.

(*Sanierungsmassnahmen*) and insolvent liquidation proceedings (*Bankenkonkurs/faillite bancaire*) pursuant to the Banking Act (all as discussed in further detail in n. 80 et seq. below). The term "**Insolvent**" shall be understood accordingly.

"**Insolvency Event**" and its occurrence means, (i) in the case of a Relevant Clearing Member other than a Bank or Securities House, the opening of a bankruptcy (*Konkurseröffnung/ouverture de la faillite*) or the confirmation of a composition agreement with assignment of assets (*Bestätigung Nachlassvertrag mit Vermögensabtretung/homologation du concordat par abandon d'actifs*) or, (ii) in the case of a Bank or Securities House, the order of the special regime bankruptcy (*Konkurs/faillite*) by the FINMA pursuant to the Banking Act. 27

"**Insolvency Representative**" means a liquidator, administrator, receiver, administrative receiver or analogous or equivalent official in Switzerland. 28

"**Party**" means a party to the LCH Agreements. 29

"**Securities**" has the meaning set forth under n. 250. 30

In this Opinion, references to the word "**enforceable**" and cognate terms are used to refer to the ability of a Party to exercise its contractual rights in accordance with their terms and without risk of successful challenge, other than avoidance as discussed herein in case of an Insolvency (see n. 150 et seq.). We do not opine on the availability of any judicial remedy. 31

2. Assumptions

The opinions expressed in this Opinion are based on the following general assumptions (as supplemented by additional specific assumptions made in this Opinion): 32

- (i) LCH and a Relevant Clearing Member enter into the LCH Agreements. 33
- (ii) The LCH Agreements and Contracts entered thereunder are governed by English law. 34
- (iii) The LCH Agreements and Contracts entered thereunder are enforceable under the laws of any jurisdiction (other than the laws of Switzerland) and each Party has duly authorized, executed and delivered, and has the legal capacity and power to enter into, each document and has received all consents, approvals, permits and resolutions (corporate and otherwise) necessary in order to duly authorize the entering into, execution and delivery of, and performance under the LCH Agreements and the Contracts entered thereunder. 35

- (iv) The entering into the LCH Agreements and each Contract, and the execution and delivery of, and performance thereunder, does not violate any Party's constitutive documents. 36
- (v) On the basis of the terms and conditions of the LCH Agreements and other relevant factors, and acting in a manner consistent with the intentions stated in the LCH Agreement the Parties over time enter into a number of Contracts. 37
- (vi) Each Party has obtained, complied with the terms of and maintained all authorizations, approvals, licenses and consents required under all laws of any applicable jurisdictions (including Switzerland) to enable it to lawfully enter into and perform its obligations under the LCH Agreements and each Contract and to ensure the legality, validity and admissibility in evidence or enforceability thereof. 38
- (vii) Each Party is duly incorporated or, as the case may be, has been duly organized under the laws of its jurisdiction or the jurisdiction of its place of business, and each Party when entering into the Agreement initially and as of the date of the conclusion of the LCH Agreements or a Contract or when providing Collateral is neither insolvent (*zahlungsunfähig/insolvable*) nor overindebted (*überschuldet/surendetté*) within the meaning of Swiss law or any other law applicable to such Party. 39
- (viii) The terms of the LCH Agreements and each Contract are agreed on arm's length by the Parties so that no element of gift or undervalue from one party to the other is involved. 40
- (ix) The LCH Agreements and Contracts constitute legal, valid and binding obligations enforceable against each Party under all applicable laws (other than Swiss law). 41
- (x) The LCH Agreements and Contracts thereunder and Collateral provided therefor, under their governing laws, are capable of being terminated, disposed of and liquidated in accordance with the terms and conditions of the LCH Agreements and all obligations under the LCH Agreements and Contracts that are to be subjected to set-off and netting in accordance with the terms and conditions of the LCH Agreements are mutual as between the Parties, i.e. each Party is the creditor or debtor of the other Party in respect of such obligations. 42
- (xi) Where relevant, the submission of the parties in the LCH Agreements to the jurisdiction of the courts of England, is legal, valid, binding, enforceable and sufficiently specified under the laws of England. 43

- (xii) There is no other agreement, instrument or other arrangement between the Parties which modifies or supersedes or invalidates the effectiveness of the terms and conditions of the LCH Agreements in particular as they relate to termination rights, rights of disposal or enforcement of Contracts and Collateral or set-off and netting. 44

3. General Questions

3.1. Capacity, Authorization, Documentary Evidence

Para. 3 Question 1: Ability of a Relevant Clearing Member to enter into the LCH Agreements; is there anything which would prevent a Relevant Clearing Member from performing its obligations under the LCH Agreements. In particular: Are there any statutory limitations on the capacity of, or specific regulatory requirements associated with, any Relevant Clearing Member entering into the LCH Agreements (including for the purpose of granting of security under the Deed of Charge)?

There are no specific Swiss regulatory requirements associated with any Relevant Clearing Member entering into the LCH Agreements. 45

Banks and Securities Houses, while being regulated, are in terms of Swiss corporate law Corporations. Unless a specific distinction is being made in this paragraph 3, any reference to a Corporation shall be read as including Corporations that are Banks and Securities House. 46

Under Swiss law, the legal capacity of a Corporation (and this term includes the capacity to enter into contracts) is determined by the corporate purpose (*Gesellschaftszweck/but de la société*) of the relevant entity, as set out in its articles of association (*Statuten/statuts*). Articles of association of Swiss corporations are publicly available documents. 47

The starting point with respect to corporate purpose considerations of a Corporation is Art. 718a para. 1 CO (this article applies to joint stock corporations; however, the following considerations also apply to the other kinds of Corporations; see Art. 764 para. 2 CO, Art. 814 para. 4 CO and Art. 899 para. 1 CO). Pursuant to this provision, authorized individuals can take such legal actions as the purpose of the Corporation may permit. The provision is interpreted broadly in jurisprudence and doctrine. It is held that any contract which, by objective standards, does not need to be regarded as being outright excluded by the corporate purpose of a corporation is deemed to be covered by the same and thereby covered by the corporation's legal capacity. 48

The rationale for this broad interpretation is generally held to be the protection of third parties' good faith expectations when transacting with Corporations, i.e. third parties are to be protected against the consequences of their transactions being null and void. That being said, it should be noted that where, by objective standards, a particular contract is to be viewed as being contrary to the corporate purpose, such contract will be null and void (*nichtig/nul*) no matter whether the counterparty was aware thereof and the fact that the 49

counterparty acted in good faith is of no relevance either.

Typically, the corporate purpose clause of a Corporation is drafted in a generic manner and corporate purpose clauses do not typically address specific legal acts or contracts / contract types, neither positively by specifically declaring them to be covered by the corporate purpose nor negatively by specifically excluding them from the corporate purpose. A particular contract must, hence, be analyzed so as to determine whether the transaction contemplated thereby is of a type that is to be viewed as compatible / incompatible with the corporate purpose of the relevant entity.

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Whether a particular contract is in the corporation's interest is not a question of the corporation's legal capacity. The individuals authorized to represent a Corporation can legally represent and do thereby bind a Corporation, even where entering into a contract is not in the corporation's interest. There are exceptions to this rule, though, where it is obvious to a diligent counterparty that a transaction is contrary to the Corporation's interest.

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In sum, in terms of the corporate power / capacity of a Corporation to enter into particular Contracts, no general statements can be made. Rather, the question would need to be analyzed on a case by case basis. However, it can be noted that under Swiss law it is held that the corporate purpose of a Corporation is to be interpreted broadly such that it covers all types of transactions that are not excluded (or clearly outside) the corporate purpose as set out in the articles of association of the relevant entity. In the case of Contracts, this analysis will have to take into consideration the purpose of the proposed Contracts and the nature of the underlying of such proposed Contracts.

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Entering into the LCH Agreements with a view of entering into Contracts, though, would not in the absence of a particular prohibition to enter into any Contracts, be deemed to be outright contrary to the corporate purpose of a Corporation in the light of the above.

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Para. 3 Question 2: What type of documents should be obtained by LCH to evidence that a Relevant Clearing Member and its officers have the capacity and authority to enter into the LCH Agreements? Is LCH required to verify such evidence?

As set out above, the legal capacity of a Corporation is defined by the corporate purpose of the Corporation. Hence, LCH should request the certified articles of association (*Statuten/statuts*) ("**Articles of Association**") of the Corporation. The register extract (a certified copy of an extract from the commercial register of the competent Canton in respect of the Relevant Clearing Member, which can be confirmed by an informal online extract as being up-to-date as of such date, "**Register Extract**") also provides for a description of the corporate purpose of the Corporation (as it is not necessarily a full and literal restatement of the provision in the Articles of Association one should for purposes of a capacity diligence rely on the Articles of Association as such, though). It is to be noted that any person is deemed to have knowledge of any fact registered with the Register of Commerce in respect

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of a Corporation. It is, hence, common practice to request the Register Extract and the certified Articles of Association.

Further, one may consider requesting the delivery of a legal opinion confirming that the LCH Agreements and the relevant Contracts fall within the capacity and corporate power of the Relevant Clearing Member. 55

Finally, we would recommend obtaining specific representations on the capacity (which is contained in most standard documentation anyhow) and in addition also a representation that each type of contemplated Contract is in compliance with its constitutive documents and internal guidelines and all laws applicable to the Relevant Clearing Member and its investments. 56

According to the CO, a Corporation is represented by its executive body (e.g. in the case of a joint stock corporation, being the most frequent legal form of a Corporation, the board of directors). Each member of the board of directors has the authority to act on behalf of the joint stock corporation within the corporate purpose, provided the Articles of Association or the organizational regulations (as may be the case) do not provide for another regime. As long as the business is not a decision which falls within the exclusive and non-transferable competence of the equity holder (e.g. in the case of a joint stock corporation, being the most frequent legal form of a Corporation, the shareholders assembly), the board of directors is competent to enter into transactions and make resolutions. Accordingly, if the transaction contemplated does not constitute a decision within the competence of the shareholders assembly (which the LCH Agreements and Contracts thereunder if entered into for the benefit of the Corporation as opposed to an affiliate of the Corporation other than a subsidiary of such Relevant Clearing Member, would typically not constitute), the board of directors is competent to enter into the LCH Agreements and Contracts thereunder without a decision of the shareholders assembly. 57

The Articles of Association may authorize the board of directors to fully or partially delegate the day to day management to individual members of the board of directors or more commonly persons not being members of the board of directors, i.e. a management board, in accordance with organizational regulations. The delegation to a management board is mandatory for a Bank. The board of directors may not, however, transfer the duties set out in Art. 716a CO (e.g. ultimate management of the Corporation and giving of the necessary directives; establishment of the organization; appointment and removal of the persons entrusted with the management and the representation). 58

In the absence of a specific resolution authorizing specific persons for entering into the LCH Agreements and Contracts thereunder (see recommendation below, though), please note that a transaction entered into by a Corporation is only valid and binding on the Corporation if it acts through authorized representatives. The transaction may be concluded either orally or in writing. The authorized representatives (and their signing/representative authority) are registered with the commercial register at the registered office of the Corporation. Hence, a 59

Register Extract should be required from the Relevant Clearing Member.

The Register Extract provides for the names of individuals who are authorized representatives generally authorized to act for and on behalf of the Corporation and for any restrictions of the powers of representation of these individuals (individual or collective representation of the Corporation, individual or dual signatory powers). If no restriction is mentioned in the Register Extract, the individuals listed in the Register Extract are authorized to represent the Corporation in all matters covered by the corporate purpose. The following should be noted however:

- Internal documents (e.g. organizational regulations) may restrict the signatory/representative power of authorized representatives. Such internal restrictions cannot, however, be asserted against good faith third parties relying on the information set out in the Register Extract, i.e. where a third party did not know or using the requisite diligence under the particular circumstances could not have known of such internal limitations or the absence of authorization in a particular case.
- The list of names and their representative power may change from time to time. Therefore, when entering into Contracts, the Relevant Clearing Member would need to be requested to deliver a certified copy of an up-to-date extract from the commercial register. Such Register Extract will provide for the relevant details.

Preferably and for practical reasons, though, the Relevant Clearing Member should be requested to designate and authorize from time to time specific persons for purposes of entering into specified Contracts on behalf of the Relevant Clearing Member and to notify such persons with names and specimen signatures and to stipulate that such list of authorized persons shall remain in effect vis-à-vis LCH until such time as any duly authorized changes shall have been notified to LCH.

More generally, in order to address any uncertainties in connection with due authorization, due execution and corporate interest, it is market practice in Switzerland to be provided with a board resolution of the relevant Corporation (or a resolution of the management board or other body or person to whom such competence has been delegated, together with the organizational regulations evidencing the competence of such management board or other body or person) approving the relevant documents and transactions and authorizing specified individuals to act on behalf of the Corporation in connection therewith. In the context of Contracts, one would typically get a board resolution (or a resolution of the management board or other body or person to whom such competence has been delegated, together with the organizational regulations evidencing the competence of such management board or other body or person) authorizing the entering into the master documentation (i.e. the LCH Agreements) and naming the persons that are entitled to enter into or designate the persons entitled to enter into Contracts thereunder together with signature specimens of such persons (with a unilateral right of the Corporation to exchange any such person as it deems fit from

time to time). The permissible Contracts may be further defined in such resolution.

3.2. Deemed domicile, residence or carrying on business

Para. 3 Question 3: Would LCH be deemed to be domiciled, resident or carrying on business in this jurisdiction by virtue of providing clearing services to a Relevant Clearing Member? If so, would LCH be required to obtain a licence or be registered before providing clearing services to a Relevant Clearing Member or are there any special local arrangements for the recognition of overseas clearing houses in these circumstances?

LCH would, subject to the discussion in n. 66 et seq. below, not be deemed domiciled, resident or carrying on business in Switzerland solely by virtue of providing clearing services to a Relevant Clearing Member as long as it acts on a strict cross-border basis only, i.e. when providing clearing services does not do so from any infrastructure or personnel under its employ in Switzerland. 65

If LCH as a foreign central counterparty ("CCP") wishes to have a regulated entity such as a Bank or Securities House join as a Relevant Clearing Member and give it direct access to clearing services, it has as a rule to seek recognition from FINMA prior to doing so pursuant to Art. 60 of the Swiss Federal Act on Financial Markets ("FMIA")⁶. FINMA shall grant such recognition if the foreign CCP is subject to adequate regulation and supervision and if the competent foreign regulatory authority has no objections against the cross-border activities of the foreign CCP into Switzerland and guarantees that it will inform FINMA if it detects violations of the law or other irregularities on the part of the Relevant Clearing Member and that it will provide FINMA with administrative assistance. We note that pursuant to the informal list of recognized foreign CCPs published by FINMA⁷, LCH has been recognized as a foreign central counterparty in Switzerland. 66

On January 1, 2020 the new Swiss Federal Act on Financial Services ("FinSA")⁸ entered into force. The FinSA stringently regulates the offering of financial services rendered in or on a cross-border basis into Switzerland. LCH being a financial market infrastructure (and not a market participant) will not in our view become subject to the FinSA in its role as a CCP. The operation of a CCP is conclusively addressed in the FMIA and there is no reason to have a second set of rules (i.e. the FinSA) in place for financial market infrastructures. In addition, a CCP is not offering financial services in the traditional sense but rather facilitates the clearing of transactions. We note that this view is supported by an older source which, 67

⁶ Bundesgesetz über die Finanzmarktinfrastrukturen und das Marktverhalten im Effekten- und Derivatehandel (FinfraG) vom 19. Juni 2015/Loi fédérale sur les infrastructures des marchés financiers et le comportement sur le marché en matière de négociation de valeurs mobilières et de dérivés du 19 juin 2015 (LIMF), SR 958.1.

⁷ Available under <https://finma.ch/en/finma-public/authorised-institutions-individuals-and-products/>, last updated on February 19, 2020.

⁸ Bundesgesetz über die Finanzdienstleistungen/ Loi fédérale sur les services financiers du 15 June 2018.

however, precedes the FinSA and as such is of limited relevance. No guidance from FINMA or the courts is available in this respect.

3.3. Formalities

Para. 3 Question 4: Are there any formalities to be complied with upon entry into of any of the LCH Agreements and, if so, what is the effect of a failure to comply with these? Please consider in particular any formalities to be complied with to enter into the Deed of Charge and Security Deed.

The LCH Agreements being governed by English law, the formal requirements would also be governed by English law and Swiss law does not impose any additional formal requirements for the LCH Agreements being effective as against a Relevant Clearing Member.

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3.4. Governing law, Jurisdiction and Arbitration, Recognition of Judgments and Arbitral Awards

Para. 3 Question 5: Would the courts of this jurisdiction uphold the contractual choice of law and jurisdiction set out in Regulation 51?

The choice of English law pursuant to General Regulation 51 (*Governing Law and Jurisdiction*) paragraph (a) is a valid choice of law in accordance with Art. 116 of the Swiss Federal Act on Private International Law ("PILA")⁹ and a Swiss court would need to apply English law with respect to contract matters of the LCH Agreements governed by General Regulation 51. For provisions dealing with set-off and netting in particular (see n. 177 et seq.), for Collateral Arrangements (see n. 255 et seq.).

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The submission by a Relevant Clearing Member to the jurisdiction of the courts of England pursuant to General Regulation 51 paragraph (c) is legal, valid and binding on the Relevant Clearing Member with respect to contract matters of the LCH Agreements governed by General Regulation 51.

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The submission by a Relevant Clearing Member to arbitration pursuant to General Regulation 51 paragraph (b) is legal, valid and binding on the Relevant Clearing Member with respect to contract matters of the LCH Agreements governed by General Regulation 51.

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No opinion is expressed, though, as to the validity and enforceability of the choice of law and the submission to arbitration and jurisdiction insofar as its relates to non-contractual obligations arising from or connected with the LCH Agreements governed by General Regulation 51.

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⁹ Bundesgesetz über das Internationale Privatrecht (IPRG)/Loi fédérale sur le droit international privé du 18 décembre 1987 (LDIP), SR 291.

A direct service of process on a Relevant Clearing Member in Switzerland other than by a Swiss court would need to be made in accordance with the Hague Convention of November 15, 1965 on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters or applicable treaties. 73

Para. 3 Question 6: Will the courts uphold the judgement of the English courts or an English arbitration award?

A final and conclusive judgment of a competent English court in respect of the LCH Agreements governed by General Regulation 51 (a "**Final English Court Decision**") would be recognized by the Swiss courts against a Relevant Clearing Member pursuant to and to the extent provided by the multilateral Convention of October 30, 2007 on Jurisdiction and the Recognition and Enforcement of Judgments in Civil and Commercial Matters (the "**Lugano Convention**") provided that following the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community (the "**Withdrawal Agreement**"), the recognition and enforcement of a Final English Court Decision may be governed by Art. 25 through Art. 30 PILA. In the absence of guidance from the Swiss courts, it is currently unclear which set of rules will apply. Art. 129(1) of the Withdrawal Agreement suggests that, during the transition period contemplated in the Withdrawal Agreement (the "**Transition Period**"), the Lugano Convention is still applicable. It is unclear, though, whether Switzerland would view itself bound by that provision. If Switzerland were to take the opposite view, recognition would still be available but would occur on the basis of the provisions of the PILA. Subject to the conclusion of any bilateral or multilateral treaties, the PILA would also apply following the expiration of the Transition Period. 74

A Swiss court would neither enforce a judgment of a court, nor take up a case, though, where proceedings have been started earlier in another competent court and where the judgment of such earlier court would be enforceable in Switzerland. 75

A final award of a competent arbitral tribunal as provided for in the General Regulations would be recognized and enforced by Swiss courts pursuant to and to the extent provided by the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the "**New York Convention**"). 76

Para. 3 Question 7: Are there any "public policy" considerations that that the courts of the Relevant Jurisdiction may take into account in determining matters related to choice of law and/or the enforcement of foreign judgements?

Enforcement of the LCH Agreements may be limited by general principles of Swiss public policy as defined in Art. 17 and Art. 18 PILA. 77

Enforcement of a Final English Court Decision in respect of the LCH Agreements may be limited pursuant to Art. 34 and Art. 35 of the Lugano Convention or, as applicable, Art. 27 PILA.	78
Enforcement of an award of a competent arbitral tribunal as provided for in the General Regulations may be limited pursuant to the New York Convention.	79
4. Insolvency Proceedings	
<i>Para. 4 Question 1: Types of Insolvency Proceedings. Would any of these not be covered by those events entitling LCH to liquidate, transfer or otherwise deal with Contracts as provided for in Rule 3 or Rule 5 of the Default Rules?</i>	
The Insolvency Proceedings against a Relevant Clearing Member and their main impact on the Relevant Clearing Member's faculty to abide by its obligations under the Agreement can be summarized as set out below:	80
4.1.1. Bankruptcy	
The legal framework as regards the enforcement of claims and the questions relating to insolvency and bankruptcy is set by the SDEBA.	81
The enforcement of claims follows different proceedings depending on the status of the debtor. As a rule, claims against Relevant Clearing Members have to be pursued in enforcement proceedings leading to the declaration of bankruptcy (<i>Konkurs/faillite</i>) and, hence, a general liquidation of all assets and liabilities of the debtor, except that, unless a bankruptcy has been declared, creditors who are secured by a pledge must follow a special enforcement proceeding limited to the liquidation of the relevant collateral (<i>Betreibung auf Pfandverwertung/poursuite en réalisation du gage</i>).	82
However, if bankruptcy is declared while such a proceeding is pending, the proceeding is ceased and the creditor participates with the other creditors in the bankruptcy proceedings.	83
A bankruptcy is declared by the court either on the initiative of a creditor or on the debtor's request. It is declared with effect as of a specific date and time of the day. All assets of the bankrupt entity at the time of declaration of bankruptcy, and all assets acquired or received subsequently, together form the bankruptcy estate which, after deduction of costs and certain other expenses, is to satisfy proportionally the creditors.	84
As a rule, the declaration of bankruptcy by the competent court needs to be preceded by a prior debt enforcement procedure (<i>Konkurs mit vorgängiger Betreibung/faillite avec poursuite préalable</i>). Any creditor or purported creditor may apply for the commencement of debt enforcement proceedings against a debtor. Upon a creditor's request, in which the	85

creditor need not evidence its claim, the competent debt enforcement authority (*Betreibungsamt/office des poursuites*) will issue a payment summons (*Zahlungsbefehl/commandement de payer*). The debtor may object to the payment summons by simple declaration (*Rechtsvorschlag/opposition*). If the debtor does so object, the creditor needs to lift such objection by a court procedure. If the creditor has a written debt acknowledgment of the debtor, it can start a special summary procedure (*provisorische Rechtsöffnung/mainlevée provisoire*). Otherwise, fully fledged litigation on the merits may need to be commenced. If the creditor prevails in the special summary procedure, but the debtor still wants to contest the claim, it is up to the debtor to commence fully fledged litigation on the merits. If the creditor prevails, the payment summons comes into legal effect and the creditor may request the continuation of enforcement proceedings and the competent debt enforcement authority (*Betreibungsamt/office des poursuites*) would then notify the debtor that bankruptcy proceedings will be opened by the court upon a respective request of the creditor unless payment of the debt will be performed within 20 days. After the lapse of such deadline without payment of the debtor, the creditor may request that the competent court open bankruptcy proceedings.

The competent court may declare a debtor bankrupt without prior enforcement proceedings (*Konkurs ohne vorgängige Betreuung/faillite sans poursuite préalable*) under the following circumstances: at the request of the debtor if (i) the debtor's board of directors declares that the debtor is overindebted (*überschuldet/surendetté*) within the meaning of Art. 725 para. 2 CO or (ii) if the debtor declares to be insolvent (*zahlungsunfähig/insolvable*), and at the request of a creditor if (i) the debtor commits certain acts to the detriment of its creditors or (ii) ceases to make payments (*Zahlungseinstellung/cessation de paiement*) or if certain events happen during composition proceedings. 86

The bankruptcy proceedings are carried out and the bankruptcy estate is managed by the receiver in bankruptcy. 87

The bankrupt party loses its capacity to dispose of its assets and any mandate or power of attorney by the bankrupt party is automatically deemed revoked with the declaration of bankruptcy. 88

For the final distribution there is a ranking of creditors in three classes. The first and the second class, which are privileged, comprise claims under e.g. employment contracts, accident insurance, pension plans and family law. Certain privileges can further result for the government and its subdivisions based on specific provisions of federal law. All other creditors are treated equally in the third class. 89

The declaration of bankruptcy has, *inter alia*, the following effects: 90

- *Loss of capacity to dispose of assets*: with the declaration of bankruptcy the bankrupt party loses its capacity to dispose of its assets. 91

- *Revocation of mandates, powers and instructions*: with the declaration of bankruptcy any powers, instructions and similar arrangements given or made by the insolvent prior to its insolvency authorising or directing a third party to legally represent the insolvent or to dispose of the insolvent's assets would expire.

92
- *Currency of filing*: Claims in a foreign currency against an insolvent party initially remain unaffected by the institution of a bankruptcy. Foreign currency claims must, however, be converted into Swiss Francs in order to participate in the distribution of the liquidation proceeds, if any. A creditor is free to choose a currency rate provider (such as the Swiss National Bank), bearing in mind that the bankruptcy liquidator may decide to reduce a claim in case the rate applied by the creditor differs from the rates published by other market currency rate provider.

93
- *Interest*: Unless a claim is secured by collateral, interest stops to accrue following the adjudication of bankruptcy. In case of secured claims, only an excess of the realization of the credit support over the principal amount may be applied against interest and any uncovered interest amount would be disregarded.

94
- *Due Date and conversion into monetary claims*: With the adjudication of bankruptcy all obligations of the insolvent become due and payable and non-monetary obligations of the insolvent would, as a rule, have to be converted into monetary claims.

95
- *Date of calculation of a claim*: The calculations to be made with respect to a claim may have to be made as of the date of the adjudication of bankruptcy in order to ascertain equal treatment of all creditors of the Insolvent.

96
- *Set-off/netting*: A set-off in a bankruptcy is, pursuant to Art. 213 SDEBA, limited to situations where the debtor of the bankrupt party seeking to set-off a claim has become the creditor of the bankrupt entity prior to the declaration of bankruptcy or where the creditor of the bankrupt party seeking to set-off a claim has become the creditor of the bankrupt entity prior to the declaration of bankruptcy and even in such situations a set-off may be subject to challenge pursuant to Art. 214 SDEBA by any other creditor establishing that (i) a claim has been acquired prior to the declaration of bankruptcy but upon knowledge of the bankrupt party's insolvency and (ii) with the purpose of gaining an advantage by virtue of such set-off to the detriment of other creditors. In other words, Art. 213 SDEBA mirrors the substantive law requirements of a unilateral right of set-off, i.e. the claims to be set-off must have existed prior to the bankruptcy and must be mutual as between the bankrupt party and the counterparty, such mutuality existed prior to the declaration of the bankruptcy and the claims must be of the same kind. Art. 214 SDEBA provides for the possibility to challenge the set-off of claims for which the mutuality has existed prior to the declaration of bankruptcy, but where such mutuality has been created under the particular circumstances set out in Art. 214 SDEBA. The analysis is to be made on the basis of each claim that is to be set-off. These provisions are supplemented by the general avoidance actions provided for in the SDEBA (n. 148

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et seq. below). These limitations on set-off also apply to netting, i.e. contractual set-off arrangements, including where such netting is part of a close-out netting.

- *Disposal of and security interest in future rights:* The undertaking to grant a security interest in Collateral to be delivered in the future would be recognized under Swiss law. However, as set out above, the transfer, assignment or the creation of the security interest constitutes a disposal with respect to such Collateral by the Relevant Clearing Member and, hence, requires the Relevant Clearing Member's ability to dispose of such Collateral at such time. Such ability is, however, lost upon the opening of bankruptcy against a Relevant Clearing Member and, therefore, the transfer or assignment of Collateral could no longer be validly made and a security interest no longer be validly created by such Relevant Clearing Member.

98
- *Realization of credit support:* With respect to the realization of a security interest in a bankruptcy, it is key to determine whether the asset being subject to a security interest is due to the nature of such security interest still to be regarded as an asset being part of the bankruptcy estate of the credit support provider:

99
- *Security interest without transfer of property:* Assets over which the credit support provider granted a regular pledge remain its property and would in case of its bankruptcy be part of its bankruptcy estate.

100
- *General rule:* As a rule, a secured party is under an obligation to remit the pledged assets to the bankruptcy estate. Such credit support is, hence, liquidated by the receiver in bankruptcy in the same manner as the other assets of the bankruptcy estate, but the secured party retains its privilege to be satisfied from the proceeds of the liquidation of such credit support with priority over unsecured creditors.

101
- *Particular rules for book-entry securities (intermediated securities under the Swiss Federal Act on Book-Entry Securities ("BESA"))¹⁰:* Art. 31 of the BESA that generally addresses the right to realize collateral consisting of book-entry securities through private realization has been amended with effect as from January 1, 2016 and the former requirement of a "representative market" has been replaced by the concept of "objectively determinable value" for collateral in the form of book-entry Securities as a prerequisite for such private realization. Art. 31 BESA distinguishes the private realization by sale (lit. a) and the private realization by appropriation (lit. b) and it is only in respect of the latter that Art. 31 BESA specifically refers to the objectively determinable value as a prerequisite for such appropriation. It implies, though, that the realization by sale is made on an arm's length basis and, hence, the price paid constitutes an objective measure for the value of the book-entry securities sold in such realization. We note that in our view that the particular requirements for

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¹⁰ Bundesgesetz über Bucheffekten (BEG)/Loi fédérale sur les titres intermédiés du 3 octobre 2008 (LTI), SR 957.1.

a private sale pursuant to Art. 31 BESA only apply to the private realization of book-entry securities following the Insolvency of the security provider and only to the extent that such book-entry securities that are pledged under a regular pledge, but not to book-entry securities under a title transfer collateral arrangement (such as a title transfer for security purposes or an irregular pledge).

Art. 32 BESA provides for a notification requirement of such liquidation unless the collateral provider is a qualified investor (*qualifizierter Anleger/investisseur qualifié*) and that any proceeds of such liquidation in excess of the amount secured is to be remitted to the collateral provider. Art. 31 para. 2 BESA stipulates that such right to a private sale remains enforceable even where insolvency proceedings have been initiated or reorganization or protective measures have been taken in respect of the collateral provider.

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- *Particular rules for Banks and Securities Houses:* Where the bankrupt credit support provider is a Bank or a Securities House (see n. 115 et seq. below), and where the parties have agreed on a private sale in the context of a regular pledge, such right to a private sale may (pursuant to Art. 27 para. 1 lit. b Banking Act and Art. 18 of the Ordinance of the FINMA on the Insolvency of Banks and Securities Houses ("**BIO-FINMA**")¹¹ still be exercised by the secured party where the credit support consists of securities the value of which can be objectively determined (*objektiv bestimmbar/objectivement déterminable*). The secured party has to inform the receiver in bankruptcy that it holds credit support under a regular pledge, though, and must evidence its right to a private sale, which typically will be done by providing a copy of the respective security arrangement providing for such right.

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- *Security interest with transfer of property:* Assets over which the credit support provider granted an irregular pledge or which the credit support provider transferred under a transfer of title or assignment for security purposes, however, are not any longer deemed to be the property of the credit support provider who merely retains contractual rights for the return of such assets, and based thereon, would in case of its bankruptcy not be part of the bankruptcy estate. The realization of such credit support would not be effected through the receiver in bankruptcy. The secured party would, hence, realize the credit support outside official realization proceedings, i.e. through private realization (*Privatverwertung/realisation privée*) but needs to account for the sales proceeds and remit any excess sales proceeds to the receiver in bankruptcy (*Abrechnungspflicht/obligation de rendre compte*).

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¹¹ Verordnung der Eidgenössischen Finanzmarktaufsicht über die Insolvenz von Banken und Effektenhändlern (BIV-FINMA)/Ordonnance de l'Autorité fédérale de surveillance des marchés financiers sur l'insolvabilité des banques et des négociants en valeurs mobilières du 30 août 2012 (OIB-FINMA), SR 952.05.

4.1.2. Reorganization – Composition Agreement

The SDEBA also provides for reorganization procedures by composition with the debtor's creditors. Reorganization is initiated by a request with the competent court for a stay (*Nachlassstundung/sursis concordataire*) pending negotiation of the composition agreement with the creditors and confirmation of such agreement by the competent court. A distinction is made between a composition agreement providing for the assignment of assets (*Nachlassvertrag mit Vermögensabtretung/concordat par abandon d'actif*) which leads to a private liquidation and in many instances has analogous effects as a bankruptcy, and a dividend composition (*Dividenden-Vergleich/concordat-dividendes*) providing for the payment of a certain percentage on the creditors' claims and the continuation of the debtor. Further, there is the possibility of a composition in the form of a mere payment term extension (*Stundungsvergleich/concordat-sursis*).

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The grant of a moratorium has, *inter alia*, the following effects:

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- *Stay of Debt Collection Proceedings*: No debt collection proceedings (including debt collection proceedings to realize collateral (*Betreibung auf Pfandverwertung/Poursuite en réalisation de gage*); it is furthermore held in doctrine that a private realization of collateral granted under a *regular pledge* is also stayed for the term of such moratorium) can be initiated for the duration of the moratorium and pending proceedings are stayed. Procedural steps taken before the moratorium, however, remain in effect until a decision is taken on a composition agreement, except for (a) collection proceedings for claims of employees arising in the course of the preceding six months and certain claims based on social security laws and family law (so-called first class claims), (b) collection proceedings for debt secured by real property, and (c) collection proceedings for new debt arising out of the permitted continuation of the debtor's business. Further permitted are sequestration and other measures of securing assets for creditors. The moratorium does not preclude initiating lawsuits and continuing pending litigations.
- *Power to Dispose*: During the moratorium, the debtor's power to dispose of its assets and to manage its affairs is restricted. While the debtor may - under the supervision of the administrator - effect the necessary transactions for its daily business as long as any instruction of the administrator is observed, the debtor is barred from performing certain acts. Acts may be prohibited by law, by order of the court, or by instruction of the administrator. Without approval, the debtor is prohibited by law from (a) disposing of or pledging any fixed assets (such as holdings in other companies or real property), (b) creating new security interests, (c) issuing guarantees, and (d) entering into transactions which are not at arm's length. Such acts performed without court approval are invalid. If the debtor has entered into such a transaction, the counterparty is not entitled to any dividend or liquidation receivables resulting for the creditors. The counterparty's claims for rescission of the contract must be recorded and treated just like any other creditors'

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claim. Such counterparty will therefore only be entitled to receive a dividend from or a share in the liquidation receivables of the debtor.

- *Interest*: Unsecured debts become non-interest bearing as of the date the moratorium is granted. If the moratorium is withdrawn at a later time, the interest period will be deemed to have run during the moratorium. 110
- *Due Dates*: The moratorium does not affect the agreed due dates of debts (contrary to bankruptcy, in which case all debts become immediately due upon adjudication). Should the moratorium proceedings end in a composition agreement with assignment of assets (*Nachlassvertrag mit Vermögensabtretung/concordat par abandon d'actif*) for the benefit of creditors, then all debt will fall due to allow a general liquidation. 111
- *Set-off*: Set-off is allowed, subject to the same limitations as in a bankruptcy (see n. 97 et seq. above), whereby the date of the publication of the grant of the moratorium is relevant for determining which claims qualify for set-off. 112

The moratorium aims at facilitating the consensual restructuring or the conclusion of one of the above composition agreements. As mentioned, the composition agreement needs to be approved by the creditors and confirmed by the competent court. With the judicial confirmation, the composition agreement becomes binding on all creditors, whereby secured claims are only subject to the composition agreement to the extent that the collateral proves to be insufficient to cover the secured claims. 113

4.1.3. Emergency moratorium

The SDEBA further confers the right to the cantonal governments to stay certain procedures under the SDEBA, including the declaration of bankruptcy, at the debtor's request if the debtor's inability to pay its debts is temporary and due to extraordinary circumstances of general implication (e.g. a general economic crisis). The competent authority can order that the grant of a security interest during such stay be subject to its prior approval. This so-called emergency moratorium (*Notstundung/sursis extraordinaire*) is an exceptional remedy, which has been applied rarely only in the past. 114

4.1.4. Rules applicable to Banks and Securities Houses

The Banking Act (as last amended with effect as from January 1, 2020) and the BIO-FINMA (as last amended with effect as from April 1, 2017) set forth a detailed regime governing bankruptcy and insolvency proceedings against Banks. Pursuant to Art. 67 FinIA, the same rules apply to Securities Houses. Any reference to a Bank in this paragraph 4.1.4, hence, shall be read *mutatis mutandis* as a reference to a Securities House as well. 115

In relation to Banks and Securities Houses, the SDEBA only applies to the extent that there are no special rules pursuant to the Banking Act and the BIO-FINMA applicable. The SDEBA rules regarding composition proceedings (*Nachlassstundung/sursis concordataire*) within the meaning of Art. 293 et seq. SDEBA are disapplied altogether with respect to Banks and Securities Houses. In addition, the FINMA may deviate from the rules of the SDEBA where it deems it appropriate. Yet, according to the explanatory message accompanying the 2004 amendment of the Banking Act¹² and gathering from the BIO-FINMA, such derogation is mostly of a formal nature.

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The Banking Act grants broad powers to the FINMA which is entitled to handle the insolvency proceedings against Banks and Securities Houses. In particular, the FINMA has the authority to implement (i) protective measures (*Schutzmassnahmen/mesures protectrices*) in case of justified concern of insolvency, (ii) reorganization proceedings (*Sanierungsmassnahmen/mesures d'assainissement*) or (iii) insolvent liquidation proceedings relating to Banks (*Bankenkonkurs/faillite bancaire*).

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Protective measures may include a broad variety of measures such as in particular a bank moratorium (*Stundung/sursis*) or a maturity postponement (*Fälligkeitsaufschub/prorogation d'exigibilité*) and may be ordered by the FINMA either on a stand-alone basis or in connection with reorganization or liquidation proceedings. Such measures are largely handled by the FINMA.

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Under the Banking Act, FINMA further has the power, by ordering reorganisation proceedings (*Sanierungsmassnahmen/mesures d'assainissement*), to order the transfer of all or part of the business with assets, liabilities and contracts to another existing bank or to a newly established bridge bank, whereby such transfer will become effective upon the ratification of the reorganization plan by the FINMA (please see discussion under n. 127 below).

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The reorganization plan can also provide for a debt for equity swap. Where a reorganization plan affects creditors' rights, the FINMA has to set a deadline within which creditors can reject the reorganization plan, and if third class creditors (unsecured unprivileged creditors) that represent in excess of 50% of the amounts of third class claims in the books of the bank reject such plan, then the reorganization plan has failed and FINMA has to order the bankruptcy¹³.

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¹² Botschaft zur Änderung des Bundesgesetzes über die Banken und Sparkassen vom 20. November 2002/Message concernant la modification de la loi fédérale sur les banques et les caisses d'épargne du 20 Novembre 2002.

¹³ Pursuant to an amendment of the Banking Act in 2012, the reorganization plan cannot be rejected by the creditors with respect to a systemic bank.

- Art. 27 para. 1 Banking Act provides for the safeguard of netting arrangements (lit. a), private collateral realization arrangements (lit. b) and, in addition, porting arrangements (lit. c) in case of protective measures (*Schutzmassnahmen / mesures protectrices*), reorganization proceedings (*Sanierungsverfahren / procédure d'assainissement*) or an insolvent liquidation (*Konkursliquidation / faillite*) is being taken in respect of a Bank or a Securities House. 121
- Art 27 para. 1 lit. a Banking Act not only safeguards contractual netting arrangements as such, but also the methodology for such netting and the valuation thereunder. 122
- The same holds true for the right to privately realize collateral in the form of securities and financial instruments even though collateral has been provided outside a title transfer collateral arrangement. Art. 27 para. 1 lit. b, however, replaces the controversial requirement of a "representative market" by a concept of an "objectively determinable value" for such collateral as a prerequisite for such private realization in case of any of the afore stated measures or proceedings being taken against a Bank. In other words, Collateral that has merely been pledged and that for the Swiss law analysis is to be treated as a mere regular pledge (*reguläres Pfandrecht/droit de gage régulier*), may still be realized outside insolvency proceedings and even after the opening of the particular insolvent liquidation pursuant to Art. 33 Banking Act against a Bank as long as an objective value for such Collateral can be established. It is not any longer required that such value be established through transactions on an exchange, trading platform or other standard market (Art. 27 para. 1 lit. b Banking Act and Art. 18 BIO-FINMA). 123
- The safeguard of porting in para. 1 lit. c is new and thereby expands the protection with a view to the particular needs of cleared derivatives transactions. 124
- In sum, the provisions of Art. 27 para. 1 Banking Act further strengthen the enforceability of netting arrangements, the private realization of collateral, and now also protect portability of transactions with Banks and Securities Houses. 125
- At the same time, though, para. 2 of Art. 27 Banking Act provides for one exception to this overarching safeguard, in that it expressly reserves the temporary stay (*Aufschub / ajournement*) of a termination (*automatic termination*) or of the exercise of termination rights (*optional termination*) or of the exercise of netting, private realization of collateral or porting rights provided for in Art. 30a Banking Act (which came into force on January 1, 2016). 126
- The stay provided for in Art. 30a Banking Act replaces the stay right stipulated in former Art. 57 BIO-FINMA and, as set out above, clearly takes precedence over the safeguard of the arrangements contemplated by Art. 27 para. 1 Banking Act. 127

Such stay can be ordered in conjunction with any protective measure (*Schutzmassnahmen/mesures protectrices*), or more likely any measure taken in reorganization proceedings (*Sanierungsverfahren/procédure d'assainissement*) (e.g. a transfer of bank services or bail-in measures such as capital reduction or capital conversion) and would take precedence over the safeguard of netting, private realization of collateral and porting rights that otherwise protects such arrangements against protective measures or reorganization proceedings. It cannot be ordered in conjunction with an outright order for the insolvent liquidation (*Konkursliquidation/liquidation de la faillite*) of a Bank. However, where certain bank services should be transferred, that would basically mean that FINMA would first order such transfer of banking services and then only order the insolvent liquidation of the reorganizing Bank.

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It is further to be noted that the stay of termination or termination rights has a significantly broader scope in that it is not any longer limited to financial contracts and transactions, but applies to all contracts that provide for termination or termination rights predicated upon protective or reorganization measures ordered by FINMA. Derivatives transactions were, however, already within scope of the predecessor stay of termination rights under former Art. 57 BIO-FINMA. The effects of the stay of a termination or termination rights are also more stringent. While the maximum duration of such stay is 2 business days, the stay becomes permanent with respect to the particular measure for which it was ordered, where FINMA confirms within the 2 business days stay that the protective or reorganization measure was successful in reinstating the orderly state of a Bank's business and the satisfaction of the legal requirements by such Bank in respect of which such measures have been ordered. Where the reorganization measure consists in a transfer of all or part of the Bank's business, it is sufficient that the Bank's business as transferred to another Bank and to which the agreements subject to the stay of termination rights have been transferred satisfy such orderly state or other legal requirements.

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Finally in this context it is to be noted that Art. 31 Banking Act remained unchanged and requires that any reorganization plan and reorganization measures contemplated therein (transfer of banking services or bail in measures such as capital reduction or conversion) adequately take into account and preserve the legal and economic connections between assets, liabilities and contractual relationships that are to be subjected to such measures. This then translates into the safeguards of Art. 49 lit. b and Art. 50 BIO-FINMA that except claims that are subject to set-off/netting rights or collateral arrangements from bail-in measures (capital reduction or conversion) to the extent of such netting and collateralization. A net excess claim or an unsecured excess claim against the reorganizing Bank, though, would then be subject to such measures. In the case of a transfer of a banking business, the principle of Art. 31 Banking Act translates into an obligation to see to it that claims that are subject to a set-off/netting arrangement or collateral arrangement or have other legal or economic ties only be transferred as a whole pursuant to Art. 51 lit. h no. 1 BIO-FINMA. The requirements of Art. 31 Banking Act may therefore be viewed as an additional and

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general safeguard for set-off rights and collateral arrangements.

It seems noteworthy that the prerequisites for actions for the avoidance of transactions are somewhat different from the ones in the SDEBA in that such actions can also be brought in case of a reorganization of a Bank. Further, in the first instance, the Bank itself is competent to challenge these arrangements or dispositions once the reorganization plan has been approved by the FINMA. If the reorganization plan does not provide for the challenge of these actions by the Bank itself, the creditors of the Bank may initiate these actions.

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Finally, the FINMA has the competence to recognize foreign insolvency decisions (whether rendered in the country of such bank's legal seat or the country of its effective seat) and to put assets located in Switzerland at the disposition of a foreign insolvency estate without having to open a separate Swiss insolvency proceeding pursuant to Art. 166 et seq. PILA, subject to the foreign insolvency proceeding (i) ascertaining equal treatment to Swiss secured or privileged creditors, and (ii) providing for adequate consideration of other claims of Swiss creditors.

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4.1.5. Rules applicable to Cleared Transactions under the FMIA

A new Financial Market Infrastructure Act ("FMIA") has entered into force on January 1, 2016. The FMIA not only provides for a particular insolvency regime for Swiss financial market infrastructures but also has insolvency related rules that apply to direct and indirect participants of a financial market infrastructure.

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(a) Systemic Protection

Art. 89 FMIA addresses the protection of the financial systems and replaces the former Art. 27 para. 1-2^{bis} Banking Act.

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Art. 89 para. 1 imposes an obligation on the FINMA insofar as this is possible and to the extent that they are concerned, to inform CCPs, central securities depositories and payment systems in Switzerland and abroad of the insolvency measures it intends to take against a participant and which limit the participant's power of disposal. Such information shall include the precise time of entry into effect of the measures. FINMA generally speaking only has the power to order such insolvency measures with respect to regulated entities under its supervision (and Swiss holding companies of such regulated entities), which includes Banks and Securities Houses, but not unregulated Corporations generally. Hence this information duty is limited to Relevant Clearing Members that are Banks or Securities Houses.

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Art. 89 para. 2 then provides that orders given to a CCP, central securities depository or payment system by a participant against which such an insolvency measure has been taken shall be legally enforceable and binding on third parties ("**Finality Protection**") if:

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- they were introduced before the measure was ordered and were unalterable in

accordance with the rules of the financial market infrastructure; or

- they were executed on the business day defined by the rules of the financial market infrastructure during which the measure was ordered and the financial market infrastructure proves that it was not and should not have been aware of the measure.

Art. 89 para. 3 limits the scope of application of the Finality Protection to:

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- a financial market infrastructure that is authorised in Switzerland;
- a foreign financial market infrastructure that is recognised or supervised in Switzerland and grants Swiss participants direct access to its facilities; or
- where the membership agreement is subject to Swiss law.

The limited scope of application with respect to foreign financial market infrastructures has in principle been taken over from the former 27 para. 2^{bis} Banking Act, but the scope of application has been extended to the new regime under the FMIA insofar as it also applies to a recognized foreign financial market infrastructure. We note in this context, that a CCP when it inter alia grants direct access to a FINMA regulated entity, such as Banks and Securities House, has to seek prior recognition under Art. 60 FMIA and then falls into the category of a recognized foreign financial market infrastructure pursuant to Art. 89 para. 3 FMIA. Where a foreign financial market infrastructure is deemed systemically relevant, whether or not it is required to seek recognition under Art. 60 FMIA is as a rule subject to supervision by the Swiss National Bank and then also falls into the category of foreign financial market infrastructure that benefit from the Finality Protection.

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In moving such provision out of the Banking Act into the FMIA the scope of participants to which such rules apply has in our view been extended from Banks and Securities House to any Swiss participant as the FMIA does not limit its definition of a participant to Banks and Securities Houses and would, hence, also include unregulated Corporations that become Relevant Clearing Members.

139

(b) Insolvency Rules for direct participants (clearing members) of a CCP

Art. 90 FMIA provides for safeguards of netting, private realization of collateral and portability arrangements that correspond to the safeguards of Art. 27 para. 1 (lit. a through lit. c) Banking Act (applicable to Banks and Securities Houses), where a direct participant (clearing member) of a CCP becomes subject to insolvency measures (*Insolvenzmassnahmen/mesures en cas d'insolvabilité*). Here again, as the FMIA does not limit its definition of a participant to Banks and Securities Houses, unregulated Corporations that become direct clearing members of a CCP would in our view fall under these safeguards if they became subject to Insolvency Proceedings under the SDEBA. Contrary to Banks and Securities Houses, where such particular safeguards apply generally pursuant to Art. 27 para. 1 Banking Act, Art. 90 FMIA is limited to cleared transactions, though. Where the relevant

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clearing member is a Bank or a Securities House, these safeguards are pursuant to Art. 90 para. 3 FMIA expressly made subject to a stay ordered by the FINMA pursuant to Art. 30a Banking Act (see n. 126 et seq.) to ensure seamless enforceability of such stay. A stay ordered with respect to a Bank or a Securities House would, thus, take precedence over the safeguards of Art. 90 FMIA.

Contrary to Art. 89 FMIA that distinguishes between Swiss CCPs and foreign CCPs, Art. 90 FMIA does not make any explicit distinction between Swiss (authorized) CCPs and foreign CCPs (and therefore not either between recognized, supervised or other foreign CCPs) so that in our view the scope of application is not limited to authorized Swiss CCPs but would seem logical to be extended to foreign CCPs irrespective of whether it is recognized or supervised in Switzerland. Bearing in mind the rationale for such safeguards in the context of clearing with a CCP, namely the protection of the functioning of a CCP in case of financial difficulties of a clearing member, the exclusion of foreign CCPs would seem at odds with such rationale, in particular as the FMIA inter alia implements internationally recognized principles (G20 Principles) for derivatives trading aiming at safeguards at an international level.

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Finally, in our view such a limitation of scope, if intended (the legislative history does not reveal any such intention, though), would (as is the case for Art. 89 FMIA) have had to be made explicit.

142

In this context one has to note, that a proposal to insert a more general rule protecting netting, private collateral enforcement and portability in the SDEBA during the consultation process has not been followed. The speaker of the parliamentary preparatory commission mentioned that some concern had been voiced to have extensive safeguards provisions that they deemed to constitute insolvency privileges. The commission, however, having been convinced that this was technically required adopted Art. 90 FMIA with a clear majority and proposed it to parliament that passed such rule without further discussion.

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It is further to be noted that a new Art. 91 FMIA was proposed during the parliamentary debate and also passed without discussion. Art. 91 FMIA extends the safeguards of Art. 90 throughout the clearing chain. In our view in the context of the clearing chain, that may include unregulated indirect participants, there is no room to limit the safeguards to regulated indirect participants. Secondly, along the clearing chain the indirect participant(s) will not as a rule have a say as to the CCP (domestic or foreign) that will eventually be used, and so it would seem all the more arbitrary to have a selective application of the safeguards that would be limited to the involvement of a domestic CCP. Finally, this then again supports our view that also for purposes of Art. 90 that deals with the direct participant (with potentially a downward clearing chain that is then captured by Art. 91 FMIA) no such distinction would seem justified.

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Based on the above, in our view the scope of application of Art. 90 FMIA is not limited to authorized Swiss CCPs but is extended to recognized, supervised or other foreign CCPs. We note though, that no precedents or authoritative guidance is at this point available with respect to the scope of application discussed above. 145

4.2. Insolvency Proceedings and Default Rules 146

Para. 4 Question 2: Are any other events or procedures not envisaged in Rule 3 or Rule 5 of the Default Rules relevant?

Rule 3 taken together with Rule 5 of the Default Rules in our view covers all Insolvency Proceedings set out in paragraph 4 as relevant for this Opinion. 147

4.3. Avoidance of Transactions

Para. 4 Question 3: Is there a "suspect period" prior to Insolvency Proceedings and/or Reorganisation Measures where Contracts with a Relevant Clearing Member could be avoided or challenged and, if so, what are the grounds? What are the risks for LCH in entering into Contracts and in taking collateral in respect of those Contracts during such a period? Are any special protections or exemptions for the relevant arrangements, from avoidance or challenge, available under the law of the Relevant Jurisdiction in respect of contracts in financial markets?

The receiver in bankruptcy and certain creditors may, by means of an appropriate lawsuit (*actio pauliana*), challenge certain arrangements or dispositions made by the insolvent during a period (*suspect period*) preceding the declaration of bankruptcy or, in case of a composition agreement with assignment of assets (*Nachlassvertrag mit Vermögensabtretung/concordat par abandon d'actifs*), the grant of the moratorium. This possible challenge relates to (i) gifts and other gratuitous transactions (*Schenkungs-pauliana/action révocatoire pour libéralités*), (ii) certain acts of a debtor, undertaken at such time as the debtor was overindebted (*Überschuldungspauliana/action révocatoire pour surendettement*), and (iii) dispositions made by the debtor with the intent to disadvantage its creditors or to prefer certain of its creditors to the detriment of other creditors (*Absichtspauliana/action révocatoire pour dol*) (all as described below). 148

These rules are of general applicability and there are no specific safe-harbours to these avoidance provisions for financial market transactions. 149

(a) Avoidance of Gifts and Gratuitous Transactions

Art. 286 SDEBA allows the avoidance of gifts and other gratuitous transactions (as well as some further specifically mentioned transactions, which are, however, of no relevance in the context of this Opinion), which the debtor made within a suspect period of 12 months prior to being declared bankrupt or the grant of a moratorium. Not only outright gratuitous transactions, but also transactions where the obligations of the parties measured in economic 150

terms are disproportionate to the detriment of the bankrupt debtor, are to the extent of such disproportion and for purposes of Art. 286 SDEBA treated as gratuitous transactions.

Any such gratuitous transaction can be challenged based on the objective elements of (i) the gratuitous nature of such transaction and (ii) established damages resulting therefrom for other creditors of the debtor. 151

(b) Avoidance due to Over-Indebtedness

Contrary to Art. 286 SDEBA, Art. 287 SDEBA targets specific acts of the insolvent debtor within the suspect period of 12 months prior to the debtor being declared bankrupt or the grant of a moratorium, where the debtor, as an additional objective prerequisite, was already overindebted (*überschuldet/surendetté*) at the time the relevant act was undertaken by the debtor. The term overindebted refers to the fact that the debtor's assets do not cover its liabilities. The existence of such over-indebtedness at the time of the relevant transaction or act is, as a rule, to be proven by whoever challenges the transaction or act based on the existence thereof. 152

The targeted acts are specifically acts that prefer one creditor over the others in the light of such over-indebtedness. Such acts include (i) the posting of collateral for an existing but unsecured obligation with no pre-existing undertaking to post collateral for such obligation, (ii) settlement of monetary claims other than in cash or commonly used payment means and (iii) the settlement of claims prior to their stated maturity. 153

These acts must result in damages to the creditors. Such damages are presumed in the context of avoidance where the creditors have suffered final losses (*Verlustscheingläubiger/créancier d'un acte de défaut de bien*) in a debt collection procedure or if the bankruptcy estate challenges an act. It is then up to the defendant to prove that the challenged act did not lead to such damages. 154

There is a subjective element also in that the debtor's counterparty to the challenged transaction or act may avoid a challenge of the transaction or act if it can prove that it did not and, being diligent, could not know about the debtor's over-indebtedness. While, as mentioned above, the over-indebtedness as such needs to be proven by the challenging party, once established, the counterparty to the transaction or act is, subject to the proof of the contrary, presumed to have been aware thereof. This proof will certainly fail if the over-indebtedness was reflected in financial statements made available to such counterparty. It would in our view also fail if the counterparty did not specifically ask for financial statements despite that due diligence warranted to ask for financial statements in the light of the nature and the magnitude of the transaction contemplated and if the financial statements would indeed have revealed the over-indebtedness. 155

(c) Avoidance for Intent

Art. 288 SDEBA subjects any act of a debtor within the suspect period of 5 years prior to its being declared bankrupt or being granted a moratorium to challenge to the extent that such act was made with the bankrupt debtor's intent to prefer certain creditors over others or to disadvantage certain of its creditors and if this intention was, or exercising the requisite due diligence, must have been known to the counterparty. 156

As for the other avoidance actions, in terms of objective prerequisites, the act of the debtor must have led to damages to creditors. While the SDEBA does not specifically mention this prerequisite, it nevertheless follows from the nature and aim of an avoidance action.¹⁴ Pursuant to Swiss jurisprudence, such damages are presumed in the context of the avoidance for intent, where the challenging creditor has suffered final losses (*Verlustscheingläubiger/créancier d'un acte de défaut de bien*) in a debt collection procedure or if the bankruptcy estate challenges the act. It is then up to the defendant to prove that the challenged act did not in the case at hand lead to such damages, i.e. the burden of proof is shifted to the defendant in such cases.¹⁵ The term "act" must be read in a very broad sense. It is not limited to the conclusion of contracts, but includes any act of the debtor, in particular also any act which the SDEBA specifically targets in one of the other two avoidance actions if such act meets the further requirements of the particular avoidance for intent pursuant to Art. 288 SDEBA. 157

In terms of subjective elements, avoidance for intent calls for intent to prefer or to disadvantage creditors on the debtor's side and such intent must have been recognizable to the counterparty of the relevant act. 158

The intent on the debtor's side is presumed where the debtor could and must have recognized that the challenged act would prefer or disadvantage creditors.¹⁶ It is sufficient, though, that the debtor, while not directly aiming at such preference or disadvantage by its act, merely accepts such preference or disadvantage as a possible consequence of its act. 159

Jurisprudence holds that such intent is recognizable to a counterparty, if the counterparty, using the diligence warranted under the specific circumstances, should have foreseen a disadvantage to the other creditors as the consequence of the act of the debtor. If there are signs of a potential disadvantage to other creditors, then the counterparty has to interrogate the debtor and make the necessary further inquiries. 160

As far as banks are concerned, Swiss legal doctrine holds that the suspicion of the bank that the debtor when transacting with the bank may accept that such act disadvantages its 161

¹⁴ BGE 101 III 94; 99 III 26 et seq.

¹⁵ BGE 99 III 27.

¹⁶ Swiss Federal Supreme Court 5C.29/2000, September 19, 2000, E.3.a.

creditors generally is sufficient to deem such bank having recognized the debtor's intent. Furthermore, pursuant to such scholarly opinions, the intent is deemed recognizable not only if a bank knows about the distressed financial situation of the debtor, but also if there are indications of a distressed financial situation.

While these subjective elements have to be proven by the challenging creditor, who obviously would need to gather the requisite information, one should not in our view underestimate the impact of the presumptions which work into the hands of such creditors as discussed above and it is, hence, important to focus on the objective elements.

It is to be noted that (as is the case for Art. 286 SDEBA, but contrary to Art. 287 SDEBA) an actual over-indebtedness at the very moment when the act is undertaken does not generally constitute a prerequisite for a challenge of the relevant act. However, as the acts which can potentially be challenged under Art. 288 SDEBA are only very generically addressed by the finality of such acts, one nevertheless in our view needs to distinguish two different scenarios:

- (a) Under the first scenario, there is no sufficient indication of financial difficulties when the debtor acts. In such scenario, the act must be such that its very nature is targeted to achieve an undue preference of, or a disadvantage to, certain creditors if and when the debtor should be declared bankrupt or granted a moratorium (e.g. posting of collateral only concurrently or immediately preceding the declaration of bankruptcy, so that in fact the intention is that the counterparty should only be granted a preferential right over an asset if and when the debtor is declared bankrupt, but with no intent to treat the counterparty as a secured party other than in bankruptcy or an artificial creation of an overstated claim upon such declaration of bankruptcy in order to achieve a higher basis for a bankruptcy dividend or the like).
- (b) Under the second scenario, though, where the debtor is in financial difficulties, the scope of acts that can be challenged becomes significantly broader and on the verge of a bankruptcy eventually would also include the payment of a matured claim, if the counterparty must have recognized that the debtor would have had to file for bankruptcy and by making such payment outside the bankruptcy (which ensures proportional satisfaction of claims of the same class) prefers such counterparty over other creditors who will end up with a dividend that will not cover their full claims and who thereby are not getting the same *pro rata* share as the counterparty.

4.4. Jurisdiction Clauses and Insolvency Actions

Note that, under Swiss law, jurisdiction clauses have no effect on actions brought under the SDEBA, i.e. to issues that relate to Swiss bankruptcy or insolvency law rather than to contractual law. These actions must be brought before the court at the place of the Insolvency Proceeding. Accordingly, the jurisdiction clauses provided for in the LCH

Agreements or arbitration would not be effective in case of actions relating to Insolvency Proceedings.

With respect to avoidance actions (see n. 148 et seq. above), it seems noteworthy in this context that, contrary to earlier precedents, recent precedents hold that the forum provided for in Art. 289 SDEBA (place of defendant) may be disposed of, but only after the adjudication of Insolvency by an agreement entered into by the non-defaulting party with either the administrator or the creditors.

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5. Rights to deal with Contracts and Set-off/Netting, Realization of Collateral

Para. 5 Question 1: Would LCH have the right to take the actions provided for under the Default Rules (including exercising rights to deal with Contracts under Rule 6 and rights of set-off under Rule 8 but not at this stage considering those actions specifically provided for in the Client Clearing Annex to the Default Rules) in the event that a Relevant Clearing Member was subject to Insolvency Proceedings?

Para. 5 Question 2: Is it necessary or recommended that LCH should specify that certain Insolvency Proceedings will constitute an Automatic Early Termination Event in accordance with Rule 3 of the Default Rules? If the answer is affirmative, please identify those specific Insolvency Proceedings to which the answer applies and briefly explain your reasoning.

Para. 5 Question 3: Is there relevant netting legislation in the Relevant Jurisdiction that, in the context of Insolvency Proceedings or Reorganisation Measures in respect of a Relevant Clearing Member, might apply as an alternative to the relevant arrangements set out in the Default Rules?

Para. 5 Question 4: Can a claim for a close-out amount be proved for in Insolvency Proceedings without conversion into the local currency?

5.1. Dealing with Contracts, Set-off/Netting under Rule 6 and Rule 8 of the Default Rules

We understand and have for purposes of this Opinion assumed: that all actions provided under Rule 6 of the Default Rules constitute actions by LCH taken in its own right under the LCH Agreements for purposes of liquidating Contracts between the Relevant Clearing Member and LCH, i.e. as between the Relevant Clearing Member and LCH, terminating such Contracts, determining the losses and gains resulting from the termination of such Contracts, including by LCH entering into any of the transactions and actions provided for under Rule 6 for such purposes, and, as the case may be, applying or realizing Collateral provided therefor all as permitted by such Rule 6 as part of the LCH Agreements; that nothing in Rule 6 shall be construed as LCH acting on behalf of the Relevant Clearing Member and binding the Relevant Clearing Member (as agent for or under a power of the Relevant Clearing Member). Rule 8 of the Default Rules then provides for the calculation of one or (under Rule 11) several net sums that is/are to be paid either by the Relevant Clearing or LCH to the other Party.

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The relevant actions under Rule 6 and Rule 8, hence, deal with the termination of Contracts, determining the amount of losses or gains from such termination and calculating one net sum for all Contracts (or Contracts of a subset under Rule 11), which are the typical elements of a close-out netting arrangement. 169

It is to be noted that any instructions or powers given to LCH allowing LCH to act and in particular enter into transactions on behalf of the Relevant Clearing Member may in case of Insolvency Proceedings against the Relevant Clearing Member become subject to limitations or revocation as set-out under n. 91-92 in case of a bankruptcy or n. 109 in case of a reorganization. This may in particular affect the instructions and powers given to LCH in Regulations 101 and 105 in connection with the ForexClear Services. 170

5.2. Set-off / Netting outside Insolvency Proceedings

The summary description of netting and set-off under Swiss substantive law (see n. 172 et seq.), Swiss conflicts of laws rules (see n. 177 et seq.) and Swiss insolvency law (see n. 187 et seq. below) does not purport to provide a comprehensive summary of the respective fields of law, but rather aims at facilitating the understanding of the opinions given with respect to close-out netting at paragraph 5.5 and 5.6. of this Opinion. 171

5.2.1. Set-off / Close-out Netting under Swiss substantive law

(a) Set-off

Swiss law provides for a unilateral set-off right where: 172

- the parties are each other's reciprocal creditor and debtor (mutuality requirement) with respect to claims to be set-off;
- the mutual claims must be of the same kind (e.g. monetary claims)¹⁷;
- the party invoking the set-off must be entitled to discharge its obligation (e.g. debt must be due or may be pre-paid); and
- the counterclaim must be due.

As a matter of Swiss substantive law, the parties may also by contract stipulate a set-off of mutual claims and thereby deviate from the requirements that would otherwise apply to a unilateral right of set-off under Swiss substantive law 173

¹⁷ Monetary claims expressed in different currencies are treated as being of the same kind if the currencies are freely convertible and unless the parties specifically agreed or it is customary that an obligation must be effectively discharged in the agreed currency (effective clause). Even if there is such an effective clause, the parties may agree that different currencies may be set-off and this latter agreement would for the purposes of set-off prevail over the effective clause (BGE 130 II 318).

However, in case of Insolvency Proceedings, such deviations are subject to limitations of Swiss insolvency laws and in particular the mutuality requirement is deemed to be mandatory (see n. 172). 174

(b) Close-out netting

Contrary to set-off as such, close-out netting is neither a clear-cut concept nor specifically addressed in Swiss substantive law. With its characteristic elements being the termination of an agreement and the determination of one single net amount in lieu of all amounts otherwise owed under various transactions entered into thereunder, close-out netting would in our view be treated as a pre-agreed contractual liquidation of all such transactions in certain circumstances agreed upon by the parties that includes a comprehensive contractual set-off arrangement in respect of such transactions. 175

Under Swiss substantive law, and subject to general principles of law, the parties are free to agree on the procedure of liquidating contractual claims in advance and a close-out netting provision would, hence, be recognized under Swiss law, but would be subject to the same limitations mentioned above in case of Insolvency Proceedings. 176

5.2.2. Set-off / Netting under Swiss conflict of laws rules

Art. 148 PILA deals with set-off in an international context and addresses both the unilateral right of set-off and the contractual set-off. 177

In respect of the unilateral right of set-off, it is first to be noted that the PILA regards such right as a substantive right as opposed to a mere procedural right. Hence, it is not the *lex fori* that applies. Rather, Art. 148 para. 2 PILA refers to the law applicable to the claim owed by the party having first declared the set-off. Such claim is referred to as the main claim (*Hauptforderung/créance principale*), whereas the other claim is referred to as the set-off claim (*Verrechnungsforderung/créance compensante*) and the law applicable to the unilateral set-off pursuant to Art. 148 PILA is referred to as the set-off statute (*Verrechnungsstatut/statut de la compensation*). 178

Pursuant to Art. 148 para. 2 PILA, the set-off statute determines, *inter alia*, (i) the requirements of a unilateral right of set-off (e.g. whether reciprocity/mutuality is required and what constitutes reciprocity/mutuality), (ii) how the right of set-off is exercised, and (iii) its effects. 179

Still, it is the law that governs the main claim and the set-off claim respectively (the contract statute) which determines whether the claim satisfies such requirements (e.g. whether a claim is due if that is required and it is also the contract statute that determines who is the creditor/debtor of the respective claims). We are further of the view that the question whether a claim may be subject to set-off at all is also governed by the contract statutes of the respective claims and not the set-off statute. 180

There is some controversy in Swiss doctrine as to whether the set-off statute governs the effects of the set-off on the main claim only or whether it also governs the effects on the set-off claim, i.e. whether it is also applicable as to the question of extinction of the latter. The prevailing view seems to be that it applies to both, unless the law applicable to the set-off claim does not know the concept of set-off at all. 181

Art. 148 para. 3 PILA, by reference to Art. 116 PILA, provides that a contractual right of set-off is governed by the law chosen by the parties in the set-off agreement. In the absence of a choice of law, a Swiss court would need to determine and apply the law of such jurisdiction that is most closely related to such agreement. Again, such law would determine the requirements for set-off, but also the extent to which such requirements may be freely agreed between the parties and the effects on the respective claims. 182

The parties are, hence, free to choose the law to govern their contractual set-off arrangement. 183

A Swiss court would, hence, look to the laws chosen by the parties to determine the requirements for set-off. However, once the Swiss court has established such requirements, it may then well have to look to another law that may be applicable to the question as to whether a particular claim satisfies such requirements. It is important to note that such other laws would again be determined by the Swiss conflict of laws rules and not any conflict rules to which English laws governing the LCH Agreements as the set-off statute may further direct. 184

The application of the chosen law would, however, be subject to Swiss public policy (*ordre public*) pursuant to Art. 17 and 18 PILA. 185

In our view, typical close-out netting provisions are best analyzed not as a mere modification of a unilateral right of set-off, but as a comprehensive contractual set-off arrangement. 186

5.3. Termination, Netting / Set-off in the context of Insolvency Proceedings

5.3.1. Availability of set-off under the SDEBA

Pursuant to the SDEBA, the exercise of a set-off right remains possible post-insolvency. However, post-insolvency set-off is subject to the limitations of Art. 213 and 214 SDEBA (see n. 97 et seq. and 112 above). As a result, set-off is permissible only to the extent that the claims to be set-off have existed prior to the occurrence of an Insolvency Event, are mutual between the Insolvent Relevant Closing Member and LCH, that such mutuality existed prior to occurrence of an Insolvency Event and that the claims are of the same kind. 187

5.3.2. Availability of Close-out netting under the SDEBA

The Insolvency Proceedings applicable to a Relevant Clearing Member are described in more detail in paragraph 4 above. The provisions of Art. 211 para. 2 (*Step-in Right*) and Art. 211 para. 2^{bis} (*Statutory Close-out Netting*) of the SDEBA, that are of particular relevance to the question of enforceability of close-out netting in the context of Insolvency Proceedings, do apply to all Relevant Clearing Members. In addition, enforceability of the close-out netting as discussed below is subject to the general limitations of enforceability of obligations in case of Insolvency Proceedings.

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In the context of Insolvency Proceedings a close-out netting, i.e. a contractual termination of transactions and a calculation of a single net amount with respect to all such terminated transactions, amounts to an exclusion of the Step-in Right of Art. 211 para. 2 SDEBA (as defined below) and, in case of Qualifying Contracts (as defined below), the Statutory Close-out of Art. 211 para. 2^{bis} SDEBA (as defined below), the validity of which needs to be analyzed pursuant to Art. 211 para. 2 and Art. 211 para. 2 SDEBA respectively.

189

(a) Termination and Step-in Right (Art. 211 para. 2 SDEBA)

Insolvency does not as a rule *per se* result in a termination of the Insolvent's contracts. Subject to the Step-in Right (as defined and discussed below), though, all non-monetary claims against the Insolvent are converted into monetary claims in case of a declaration of bankruptcy (*Konkurseröffnung/ouverture de la faillite*) or a ratification of a composition agreement with assignment of claims (*Genehmigung Nachlassvertrag mit Vermögensabtretung/approbation du concordat par abandon d'actifs*). In turn, parties are free to stipulate in their contract that an Insolvency shall give rise to a termination of such contract, be it automatically or by notice.

190

In a bankruptcy, the receiver in bankruptcy (*Konkurs/faillite*) may pursuant to Art. 211 para. 2 SDEBA request the fulfilment of any undischarged obligations resulting from bilateral contracts by the other contractual party provided that the bankruptcy estate also fully fulfils its obligations under the relevant contract and at the request of the non-defaulting party secures performance of such obligations (the "**Step-in Right**"). The Step-in Right is by analogy available to the liquidator in case of a composition agreement with assignment of assets (*Nachlassvertrag mit Vermögensabtretung/concordat par abandon d'actifs*). Any obligations for which the relevant Insolvency Representative exercised the Step-in Right becomes a direct obligation of the relevant insolvency estate (*Massaverbindlichkeit/dette de la masse*) and must be satisfied from such insolvency estate ahead of other creditors. This *inter alia* is the reason why an Insolvency Representative will only exercise the Step-in Right with respect to obligations that it views as critical for an orderly and favorable liquidation of a Relevant Clearing Member and thereby as benefitting all creditors.

191

There are no precedents to date as to whether the statutory Step-in Right may be set aside by contractual termination arrangements of the parties. 192

However, according to what we see as the predominant view in Swiss legal doctrine and supported by an older decision of the Swiss Federal Supreme Court, the Step-in Right constitutes a mere procedural provision rather than a substantive law rule. Based on such qualification, but also more generally and irrespective of such qualification, such predominant view in Swiss legal doctrine holds that the Step-in Right is not of a mandatory nature, but may be validly excluded by the parties in an agreement entered into prior to the commencement of Insolvency Proceedings. 193

For Banks and Securities Houses as well as for centrally cleared transactions the Banking Act and the FMIA respectively provide for safeguards of netting arrangements and thereby in effect also against a Step-in (see n. 227 et seq. below). 194

Having regard to the legislative history, the predominant view in Swiss legal doctrine holds that the more recent introduction of the Statutory Close-out (as defined and discussed under n. 204 et seq. below) pursuant to Art. 211 para. 2^{bis} SDEBA did neither aim at altering the qualification of Art. 211 para. 2 SDEBA as a procedural provision nor limit Close-out Netting to Qualifying Contracts specifically addressed in Art. 211 para. 2^{bis} SDEBA. 195

Many authors when discussing the Step-in Right highlight the fact that Art. 211 para. 2 SDEBA only grants the Insolvency Representative a Step-in Right into contractual obligations as the same were agreed between the Parties and as they stand as per the occurrence of an Insolvency Event, i.e. the Insolvency Representative cannot claim any more rights than the Insolvent party could have claimed or disregard any rights that the non-defaulting party has under the respective contract. 196

As an immediate result, it is largely uncontested that there is no Step-in Right where contracts have been effectively terminated by the time of the occurrence of an Insolvency Event. 197

It is also largely uncontested that this includes a termination based on an automatic early termination clause that provides for an automatic termination of the relevant agreement and transactions thereunder as of or immediately prior to the occurrence of an Insolvency Event ("**Automatic Early Termination**"). 198

With respect to optional termination clauses ("**Optional Early Termination**"), though, some authors have some reservations in particular as regards timing: Some authors request that the right of optional termination must, at the latest, be exercised at the time of (or as of) the occurrence of the Insolvency Event, while others merely request that it be exercised without undue delay thereafter. While discussed in the context of Art. 211 para. 2 SDEBA, this is mostly based on concerns of not allowing a counterparty to speculate against the insolvency estate and thereby eventually with the concern of equal treatment of all creditors in Insolvency Proceedings rather than the Step-in Right. To address this concern, some authors 199

hold that the optional termination must be declared with retroactive effect as of the occurrence of the Insolvency Event. It is unclear, though, whether this truly means that the termination as such would need to have a retroactive effect as of such date, which seems a somewhat fictive concept, or whether this is not rather meant to require a calculation of the single net amount as of such date, which would be sufficient to satisfy the rationale of equal treatment of creditors.

There is only one author as far as we can see that explicitly addresses the question whether an optional termination right can still be exercised where the Insolvency Representative has indeed exercised its Step-in Right and concludes that this would need to be assessed on a case by case basis but in principle remains possible. 200

Finally, there is one author that holds that unless termination has occurred immediately prior to the occurrence of the Insolvency Event, the provisions of the SDEBA become mandatory. The statement is made in respect of Art. 211 para. 2 (which is the Step-in Right discussed here). It is not entirely clear from the context, though, whether the author did not in fact mean Art. 211 para. 2^{bis} (which is the Statutory Close-out discussed below). The author, though, acknowledges that this view is not in line with the predominant view in Swiss legal doctrine. 201

(b) Step-in Right and "Cherry Picking"

Swiss legal doctrine also discusses the potential of the Step-in Right to allow the Insolvency Representative to engage in "cherry picking" among the Insolvent's unfulfilled contractual obligations. Indeed the Step-in Right is a discretionary and unilateral right of the Insolvency Representative. 202

In this context Swiss legal doctrine also discusses the single agreement concept as a means to avoid cherry picking among transactions. While Swiss substantive law does not specifically provide for the single agreement concept, based on the parties' freedom to contract it is the predominant view in Swiss legal doctrine that within the confines of Swiss law such a concept is permissible under Swiss substantive law and would be recognized to the extent legal, valid, binding and enforceable under the laws governing such single agreement. It is further held that due to the non mandatory nature of Art. 211 para. 2 SDEBA, such single agreement concept would also need to be upheld following the occurrence of an Insolvency Event. 203

(c) Termination and calculation of single net amount and Statutory Close-out

Art. 211 para. 2^{bis} SDEBA excludes the Step-in Right in respect of certain types of agreements, i.e. (i) fixed term agreements (*Fixgeschäfte/engagement à terme fixe*) within the meaning of Art. 108 CO¹⁸, and (ii) certain financial derivative transactions, including financial swaps, forward agreements and options (each, a "**Qualifying Contract**") and in turn provides for automatic termination of such contracts in case of bankruptcy¹⁹ and the abstract calculation of a liquidation amount based on market or exchange quoted prices as compared to the contractual value (the "**Statutory Close-out**"). Such calculation does not as per its wording, however, take into account any further damages or costs of either party. 204

For Banks and Securities Houses as well as for centrally cleared transactions the Banking Act and the FMIA respectively provide for safeguards of netting arrangements and thereby in effect also against a Step-in (see n. 227 et seq. below). 205

Art. 211 para. 2^{bis} SDEBA was introduced in the light of close-out netting agreements that had become customary in the financial community and primarily aimed at backing the viability of close-out netting in Insolvency Proceedings. This, in our view, needs to be borne in mind when interpreting Art. 211 para. 2^{bis} SDEBA which, as outlined above, does not limit itself to excluding the Step-in Right of Art. 211 para. 2 SDEBA, but provides for a Statutory Close-out in that it stipulates that the relevant contracts are automatically terminated and lays down an abstract calculation of a liquidation amount, which is similar but not identical to typical close-out netting provisions and may be more restrictive as to, for instance, further costs and damages. 206

This raises the question whether Art. 211 para. 2^{bis} SDEBA may be modified, most noteworthy as to the automatic character of a termination and the calculation method to be applied following such termination. What we view as the prevailing view in Swiss legal doctrine is that as for Art. 211 para. 2 SDEBA the more recent Art. 211 para. 2^{bis} SDEBA does not constitute mandatory law either and may, hence, be modified by advance agreement. While there are dissenting opinions as discussed below, the Federal Office of Justice specifically stated in its report regarding the revision of the Step-in Right that the proposed provisions were aimed at procedural aspects only and not at aspects of substantive law. 207

¹⁸ Any agreement in which the parties agree that specific performance should only be permissible on or up to a certain date or at least would only be permitted if the other party were to specifically agree to it, qualifies as such fixed term agreement (*Fixgeschäft/engagement à terme strict*). Furthermore, the predominant view is that the exclusion of the Step-in Right pursuant to Art. 211 para. 2^{bis} SDEBA applies to all fixed term agreements rather than to financial agreements only.

¹⁹ By analogy, this applies in case of a confirmation of a composition agreement with assignment of assets (*Nachlassvertrag mit Vermögensabtretung/concordat par abandon d'actifs*).

Several authors, though, hold that the automatic character of the termination is to be viewed as mandatory or at least to limit optional termination to a termination with effect prior to the occurrence of an Insolvency Event, i.e. that in the absence of a termination by the occurrence of an Insolvency Event, the Statutory Close-out becomes mandatory. 208

Other authors hold that the statutory calculation method is mandatory or that at least the calculation under a contractual calculation method must mandatorily be made as of the opening of Insolvency Proceedings. 209

Overall, though, there seems to be more controversy as to whether an Optional Early Termination taking place after the occurrence of an Insolvency Event should still be effective or whether automatic termination upon the opening of Insolvency Proceedings is mandatory in the light of Art. 211 para. 2^{bis} SDEBA than as to the non mandatory nature of the calculation method under Art. 211 para. 2^{bis} SDEBA. 210

So, if, contrary to what we deem the prevailing, albeit not uncontested view in Swiss legal doctrine, a Swiss court were to hold that both the calculation method and the automatic termination pursuant to Art. 211 para. 2^{bis} SDEBA are mandatory, then the Statutory Close-out would apply to all transactions that are Qualifying Contracts and automatically terminate them and one would calculate one single liquidation amount in respect of all such terminated Qualifying Contracts. 211

(d) Conclusions – Automatic Early Termination vs. Optional Termination

While Optional Early Termination is valid and binding on the parties prior to the occurrence of an Insolvency Event, the effectiveness of Optional Early Termination following an Insolvency Event raises more questions as set out above. 212

In sum, Swiss legal doctrine holds that optional termination would allow a counterparty to speculate to the detriment of other creditors of the insolvent debtor in the absence of a pre-agreed short notice period and should, therefore, be disregarded. It is also held that if the termination notice provides for an effective date which is later than the date of the occurrence of an Insolvency Event, then notwithstanding any designation of another date, all calculations may need to be made as of such date. 213

As mentioned above, the Statutory Close-out for Qualifying Contracts, if viewed as mandatory, could overrule the Optional Early Termination and the calculation of the amount owed by the parties pursuant to their close-out netting provisions. 214

Automatic Early Termination with the occurrence of an Insolvency Event is valid and binding under Swiss law and in the light of the uncertainties discussed with respect to optional termination, we would generally recommend to elect automatic early termination with respect to a Relevant Clearing Member rather than to provide for a short term period within which an optional termination would need to be declared. 215

Yet, with what we view as the prevailing view in Swiss legal doctrine, but in the absence of any court precedents with respect to the very question, we are of the view that Optional Early Termination should also be upheld and recognized, in particular if the reason for such Optional Early Termination rather than Automatic Early Termination and the timing thereof is warranted by the fact that Contracts are cleared and the CCP needs time to take appropriate measures to address the Insolvency of a clearing member and the speculative aim can, hence, be ruled out. 216

With the safeguards of clearing arrangements of Banks and Securities Houses pursuant to Art. 27 para. 1 lit. a Banking Act that now clearly also address the method of calculation and valuation to arrive at a net single amount we believe that these give strong arguments to uphold an Optional Early Termination (see n. 228 et seq.), but there is to date no precedent or authoritative guidance that would support this view (see n. 229). 217

Based on Art. 90 FMIA, which in our view in addition to Banks and Securities Houses also applies to unregulated Corporations that are direct clearing members of a CCP, and without distinction between Swiss and foreign CCPs, the same holds true in our view for cleared Contracts of a Relevant Clearing Member that is an unregulated Corporation (see n. 230). Again, though there is to date no precedent or authoritative guidance that would support this view (see n. 230). 218

5.3.3. Determination of a single net amount

Close-out netting by means of calculating a single net amount constitutes a valid pre-agreed contractual liquidation of all transactions subject to such close-out netting. Such close-out netting would be upheld in Insolvency Proceedings, subject to the discussion of close-out netting and termination under n. 188 et seq. above. In particular, any calculation and valuation to be made in the context of the close-out netting, which pursuant to the relevant terms has been made as of a date after the occurrence of an Insolvency Event, i.e. the adjudication of bankruptcy (*Konkurseröffnung/ouverture de la faillite*) or the confirmation of a composition agreement with assignment of assets (*Bestätigung Nachlassvertrag mit Vermögensabtretung/homologation du concordat par abandon d'actifs*), could be disregarded in case it proves to be to the detriment of the insolvency estate and adjusted for a calculation of such more favorable amount as of the date of the occurrence of an Insolvency Event. For Banks and Securities Houses as well as for centrally cleared transactions the Banking Act and the FMIA provide for safeguards of netting arrangements and as discussed below there are in our view good arguments that these safeguards would also allow a determination as of a date reasonably after the Insolvency Event (see n. 227 et seq. below). 219

Pursuant to the SDEBA, the exercise of a set-off right remains possible post-insolvency. However, post-insolvency set-off is subject to the limitations of Art. 213 and 214 SDEBA. As a result mutuality becomes a mandatory requirement and set-off is permissible only to the 220

extent that the claims to be set-off have existed prior to the occurrence of an Insolvency Event and were mutual between the Insolvent and the counterparty prior to the Insolvency Event and are of the same kind.

As mentioned under n. 186 above, close-out netting provisions are best analyzed as a comprehensive contractual set-off. This question, which eventually would have to be decided under the laws chosen by the parties to govern the close-out netting provisions, has, however, no impact in our view on our conclusion that the determination of a single net amount is enforceable following the occurrence of an Insolvency Event, subject, though, to the discussion under n. 190 et seq. above.

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5.3.4. Currency of filing

Claims in a foreign currency against an insolvent party initially remain unaffected by the institution of Insolvency Proceedings. Foreign currency claims must, however, be converted into Swiss Francs in order to participate in the distribution of the liquidation proceeds, if any. A claim of the solvent party for a single net amount denominated in a currency other than Swiss Francs would thus only be enforceable in an Insolvency Proceeding if converted into Swiss Francs as of the date of the occurrence of an Insolvency Event, i.e. the adjudication of bankruptcy (in case of a bankruptcy) or as of the confirmation of the composition agreement (in case of a composition agreement with assignment of assets).

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5.3.5. Date

The calculations to be made in determining a single net amount may have to be made as of the occurrence of the Insolvency Event in order to ascertain equal treatment of all creditors of the Insolvent. With respect to Banks and Securities Houses generally and with unregulated Corporations being direct clearing members of a CCP, in our view the safeguards of Art. 27 para. 1 lit a Banking Act and Art. 90 para. 1 lit. a FMIA respectively would allow for some flexibility as to timing and thereby allow the rules and regulations of a CCP to provide for a valuation date under its pre-set rules that would be later than the occurrence of an Insolvency Event with respect to a Relevant Clearing Member, but there is not to date any precedent or authoritative guidance that would support this view (see n. 227-228 for Banks and Securities Houses and more generally for cleared transactions n. 229).

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5.3.6. Accrual of Interest

Unless a claim is secured by collateral, interest stops to accrue following the adjudication of bankruptcy or the grant of a moratorium. Any interest element would, hence, under such premises be disallowed for purposes of calculating a single net amount or applying a set-off and no interest would be allowed on a single net amount. In case of secured claims, only an

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excess of the realization of the collateral over the principal amount may be applied against interest and any uncovered interest amount would be disregarded.

5.4. Safeguard provisions of Art. 27 para. 1 lit. a Banking Act and Art. 90 para. 1 lit. a FMIA

As mentioned in paragraph 4, Art. 27 para. 1 lit. a Banking Act provides for a safeguard of advance netting arrangements in case of Insolvency Proceedings against Banks and Securities Houses (see n. 115 et seq.). The safeguards apply to the netting arrangements as such as well as to the method applied to such netting and the valuation thereunder as per the netting arrangement. The netting arrangement must be agreed in advance. 225

The safeguard of Art. 27 para. 1 lit. a Banking Act applies to all Insolvency Proceedings, i.e. including protective measures, reorganization proceedings and the insolvent liquidation of a Bank or a Securities House, subject only to the exception of a stay of termination rights ordered by FINMA under Art. 30a Banking Act (see n. 126 et seq.). 226

To the extent that the Banking Act and the BIO-FINMA do not provide for specific rules, the SDEBA applies, including Art. 211 SDEBA discussed above. The safeguard of Art. 27 para. 1 lit. a Banking Act, however, takes precedence also over Art. 211 SDEBA and to the extent provided, protects the netting arrangements against any negative effects of Art. 211 SDEBA. This clearly overrides the Step-in Right (Art. 211 para. 2 SDEBA) and the Statutory Close-out (Art. 211 para. 2^{bis} SDEBA). 227

We note that Art. 27 para. 1 lit. a Banking Act does not specifically address the timing of the termination and the netting and valuation under a netting arrangement. We also note that the timing of the termination and the netting and the date of valuation are not only driven by Art. 211 SDEBA but also by general principles of equal treatment of creditors in Insolvency Proceedings. Still we believe that Art. 27 para. 1 lit. a Banking Act adds a strong argument in particular in the context of a liquidation process of a CCP that Optional Termination and valuation is permissible also as of a date reasonably (i.e. warranted by orderly liquidation rules of a CCP) later than the occurrence of an Insolvency Event under its netting safeguard. 228

There is no precedent or authoritative guidance as to the question whether the precedence of the safeguard of Art. 27 para. 1 lit. a Banking Act does indeed as per the views expressed above also extend to a termination and determination of a net sum as of a date later than the occurrence of an Insolvency Event. 229

As mentioned in paragraph 4, Art. 90 para. 1 lit. a FMIA provides for the same safeguard for netting arrangements in respect of a direct participant (clearing member) of a CCP. As further discussed, in our view the safeguards of Art. 90 FMIA apply to any direct participant, i.e. not only to Banks and Securities Houses, but also to unregulated Corporations, i.e. to all Relevant Clearing Members and also where the CCP is a foreign CCP and irrespective of whether it is recognized or supervised in Switzerland (see n. 139 et seq.). The safeguard of 230

Art. 90 para. 1 lit. a FMIA, therefore, would in our view also apply to a Relevant Clearing Member of LCH that is an unregulated Corporation with the same conclusions discussed above in respect of Art. 27 para. 1 lit. a Banking Act. We note, however, that there are not precedents or authoritative guidance at this point of time with respect to the scope of application of Art. 90 FMIA that would confirm this view. Where the relevant clearing member is a Bank or a Securities House, these safeguards are pursuant to Art. 90 para. 3 FMIA expressly made subject to a stay ordered by the FINMA pursuant to Art. 30a Banking Act (see n. 126 et seq.) to ensure seamless enforceability of such stay. A stay ordered with respect to a Bank or a Securities House would, thus, take precedence over the safeguards of Art. 90 FMIA.

5.5. Enforceability of the Default Arrangements upon a Default of the Relevant Clearing Member outside Insolvency Proceedings against the Relevant Clearing Member

Based on the above we are of the opinion that the Default Arrangements providing for the termination of the Contracts and the calculation of one or several single net sums upon the occurrence of a Default of the Relevant Clearing Member, but outside Insolvency Proceedings against the Relevant Clearing Member, are enforceable against the Relevant Clearing Member under Swiss law. We are of this opinion because and subject to the following discussion:

- The Default Arrangements are governed by English law. 232
- Pursuant to Art. 116 and 148 PILA the Parties are free to choose English law to govern the LCH Agreements including the Default Arrangements and the exercise of rights such as close-out and close-out netting against the Relevant Clearing Member thereunder. A Swiss court would, hence, have to apply English law to the Agreement and the Default Arrangements and the exercise of rights thereunder, subject only to Swiss public policy pursuant to Art. 17 and 18 PILA. 233
- To the extent that the Default Arrangements and in particular the close-out and close-out netting provided thereunder are legal, valid, binding and enforceable under English law, the Default Arrangements would also be enforceable under Swiss law as against a Relevant Clearing Member outside Insolvency Proceedings. 234
- We note that, in the discussion in Swiss legal doctrine, close-out netting is generically treated as a contractual liquidation of several transactions that includes the termination of such transactions, the determination of a value typically by the non-defaulting party based on the (that will be payable by or to the defaulting party) for each such transaction and the netting or set-off of all such values payable by one party to the other to arrive to a net single amount payable by the party owing the higher amount. 235

- Under Swiss substantive law, the netting part is thereby a contractual set-off that, unless the parties agree differently, would rely on the principles governing the set-off at law, including the requirement that the claims to be set-off be mutual between the parties.
236
- Under Swiss substantive law, mutuality means that each party is the legal creditor or debtor of the claims to be set-off.
237
- Outside Swiss Insolvency Proceedings, parties are in principle free to modify or waive certain prerequisites of the set-off at law, including the prerequisite of mutuality, subject to all parties whose claims are to be included in such netting have agreed to it and more generally subject to such consent not being limited at law (such limitations could, e.g., arise under corporate law if one company were allowing set-off of its claims for obligations of an affiliated company), such limitations being typically tied to the person giving such consent and thereby governed by the laws of such person's domicile or seat, i.e., in the context of a Swiss person, Swiss law.
238
- We understand and have assumed for purposes of this Opinion (see n. 42 above), though, that all rights and obligations under the LCH Agreements and the Contracts are obligations in respect of which the Parties are reciprocally creditor and debtor under English law and are thereby mutual between the Parties, so that the close-out netting under the Default Arrangements satisfy the mutuality requirement.
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5.6. Enforceability of the Default Arrangements in case of an Insolvency of the Relevant Clearing Member

Based upon and subject to the discussion of the enforceability of the Default Arrangements outside an Insolvency of the Relevant Clearing Member (see n. 231 et seq.) we are of the opinion that the Default Arrangements and close-out netting thereunder remain enforceable in case of the occurrence of an Insolvency of the Relevant Clearing Member, provided that if contrary to the views expressed herein, the safeguards of Art. 27 para. 1 lit. a Banking Act and Art. 90 para. 1 lit. a FMIA do not extend to the timing of such calculation, or with respect to Art. 90 para. 1 lit. a FMIA do not extend to unregulated Corporations and/or foreign CCPs, such views expressed herein not being to date supported by a precedent or authoritative guidance, the calculation of the single net amount[s] as provided under the Default Arrangements may need to be done as of the day of the occurrence of an Insolvency Event and provided further that any net amount[s] in favor of LCH would have to be converted into Swiss Francs as of the day of the occurrence of an Insolvency Event. We note in this connection our general recommendation to have Automatic Early Termination apply to the Relevant Clearing Member (see n. 212 et seq. above). We note also, however, that in our view, that is not to date being supported by any precedent or authoritative guidance, the safeguards of Art. 90 para. 1 lit. a FMIA constitute strong arguments for the permissibility and viability of Optional Termination in the context of cleared Contracts. We are of this

opinion because and subject to the following discussion:

- As per our understanding and assumption the set-off/netting under the close-out netting provisions of the Default Arrangements is based on mutuality of the claims to be subjected to the close-out netting between LCH and the Insolvent Relevant Clearing Member (see n. 42 above). 241
- The close-out netting provisions thereby satisfy not only the requirements that Swiss substantive law provides for a contractual set-off/netting agreement, but also the requirements for the set-off rights at law, that in the light of Art. 213 and 214 SDEBA become mandatory upon the occurrence of an Insolvency Event with respect to a Relevant Clearing Member as far as mutuality of claims to be set-off or netted is concerned (see n. 97 above). 242
- Following the occurrence of an Insolvency Event set-off (see n. 187 above) and netting (see n. 188 et seq.) remain, in principle, available subject to Art. 213 and 214 SDEBA. 243
- Following the occurrence of an Insolvency Event, the calculation of one or several single net amount[s] based on the exercise of the set-off/netting rights under the Default Arrangements is still permitted (see n. 219 et seq.), but may need to be done at values as of the day of the occurrence of the Insolvency Event (see n. 223) although strong arguments can be made that a reasonably later point in time is permissible (see n. 225 et seq. above). 244
- A single net amount that is not expressed in Swiss Francs would need to be converted into Swiss Francs (see n. 222). 245
- As exception to the safeguards of Art. 27 para. 1 lit. a Banking Act and Art. 90 para. 1 lit. a FMIA (when applied to a Bank or Securities House), the stay of termination rights pursuant to Art. 30a Banking Act would take precedence, and would postpone or prevent the termination and close-out of Contracts and thereby also the close-out netting of Contracts as contemplated by such stay right of the FINMA (see n. 126 et seq.). 246

6. Collateral Arrangements

6.1. Additional Assumptions

The opinions expressed under this paragraph 6 are based on the general assumptions under paragraph 2 and the following additional assumptions:

- (i) Collateral provided by the Relevant Clearing Member under the Collateral Arrangements or received and held by LCH on behalf of the Relevant Clearing Member consists solely of Securities and Cash. 247

- (ii) Any Collateral in the form of cash ("**Cash**") is denominated in a freely convertible currency and where transferred to LCH by the Relevant Clearing Member under Regulation 20 of the General Regulations of LCH is transferred to LCH on an outright title transfer basis ("**Title Transfer Cash**"). 248
- (iii) Enforcement of Collateral in the form of Title Transfer Cash by LCH would be made by application, i.e. set-off against any obligation of the Relevant Clearing Member. 249
- (iv) Collateral in the form of securities ("**Securities**") provided by the Relevant Clearing Member under Regulation 20 of the General Regulations of LCH or otherwise received by LCH for the account of the Relevant Clearing Member is held by LCH as Charged Property in a Securities Account subject to the Deed of Charge and thereby constitutes Charged Property, being further assumed that such Securities consists of intermediated securities whereby: 250
- the Securities qualify as *securities*, i.e. financial instruments capable of being credited to a securities account with a qualifying intermediary within the meaning of Art. 1 para. 1(a) of the Hague Convention on Intermediated Securities; and 251
 - the Securities are indirectly held through an intermediary and booked into a securities account within the meaning of Art. 1 para. 1(b) of the Hague Convention ("**Securities Account**") with an intermediary that in the course of a business or other regular activity maintains securities accounts for others or both for others and for its own account and is acting in that capacity under Art. 1 para. 1(c) of the Hague Convention ("**Qualifying Intermediary**"). 252
- (v) In the context of the Deed of Charge such Securities are securities held in a Securities Account held by the Relevant Clearing Member with LCH being a Qualifying Intermediary, whereby the Securities Account is located either in England and governed by English law or in the United States and governed by New York law, and the Securities have been subjected to a perfected security interest in favour of LCH pursuant to the Collateral Arrangements and English law (in case of Securities in a Securities Account in England) or New York Law (in the case of a Securities Account in the United States) by the Relevant Clearing Member. 253
- (vi) In respect of all Collateral, that the value of such Collateral can be objectively determined. 254

6.2. General Opinions on Collateral Arrangements

Para. 6 Question 1: Would the Deed of Charge be effective in the context of Insolvency Proceedings or Reorganisation Measures in respect of a Relevant Clearing Member? Is there anything that would prevent LCH from enforcing its rights under the Deed of Charge? Would LCH be required to take any particular steps or abide by any particular procedures for the purposes of enforcing against collateral provided to it by a Relevant Clearing Member under the Deed of Charge?

6.2.1. Choice of Law

(a) Preliminary Remarks

Under Swiss substantive law one has to distinguish (i) the agreement to grant a security interest (*Verpflichtungsgeschäft/acte générateur d'obligations*) (the security undertaking) and (ii) the actual creation of the relevant security interest agreed under the contractual undertaking (*Verfügungsgeschäft/acte de disposition*) (the act of disposition). Both are required in order to create a legal, valid and binding security interest. In addition, the security provider must, in principle, have the right to dispose of the proposed collateral. Further acts might be necessary in order to ascertain that a security interest is effective as against third parties, which can in relation to such third parties be described as *perfection* of such security interest. 255

Under the pledge approach (*reguläres Pfandrecht/droit de gage régulier*), a limited right *in rem* (*beschränktes dingliches Recht/droit réel limité*) is conferred to the pledgee. The pledgor retains ownership in the pledged assets and the secured party must return the same assets upon discharge of the secured obligation. Typically, this means that the pledgee is not entitled to use, rehypothecate or transfer the asset to third parties. The pledge approach is laid down in the Swiss Civil Code ("CC")²⁰ and is applicable to certificated securities and uncertificated securities whether or not directly or indirectly held. 256

Under the irregular pledge approach (*irreguläres Pfandrecht/droit de gage irrégulier*), the security undertaking provides that the pledgor transfers fungible assets to the irregular pledgee with the understanding that the irregular pledgee return the same kind and quantity as opposed to the original assets, in each case to secure the repayment of an underlying obligation. As a consequence, the pledgee is typically allowed to use, rehypothecate or transfer the collateral to third parties. 257

The irregular pledge results, under Swiss substantive law, in an outright transfer of full ownership as opposed to the regular pledge which confers a limited right *in rem* only. In addition, the irregular pledgee is, as mentioned above, only to return fungible assets of the same kind and quantity once the secured obligation has been discharged. 258

²⁰ Schweizerisches Zivilgesetzbuch (ZGB)/Code civil Suisse du 10 décembre 1907 (CC), SR 210.

Although the irregular pledge is not dealt with specifically in the CC, its admissibility is not disputed and, given its proximity to the pledge, it is generally held in doctrine that the rules with respect to a pledge apply by analogy where suitable. 259

Under the transfer of title approach, the full rights in the collateral are transferred to the secured party. As under the irregular pledge approach, the secured party does not merely receive a limited right *in rem*, but full ownership. In contrast to the irregular pledge approach, though, the secured party is under an obligation to return the original collateral upon discharge of the secured obligation. Hence, although the secured party, based on the full ownership transfer, disposes of the collateral, it is under a fiduciary obligation not to do so other than for purposes of foreclosure. 260

(b) Security Undertaking

The undertaking to provide Collateral under the Collateral Arrangements is a security undertaking of the Relevant Clearing Member and the choice of English law to govern such undertaking is a valid choice of law in accordance with Art. 116 PILA and would have to be upheld by a Swiss court. 261

(c) Act of Disposition - Cash

Based on the assumption that Cash will not be remitted physically, but that any disposition of Cash will be conducted by way of wire-transfer and that in case of Title Transfer Cash such transfer or receipt and holding of Cash will be in an account of LCH, no transfer of a movable asset nor an assignment of a claim will take place. Therefore, the act of disposition under the Collateral Arrangements does not consist of assigning or pledging a claim that the Relevant Clearing Member holds as against its bank, but rather of a wire-transfer resulting in a debit on the Relevant Clearing Member's bank account, i.e. in the discharge of the Relevant Clearing Member's bank from paying the respective amount, and in a credit on the bank account of LCH. Thus, according to our view, the act of disposition consists of a chain of payments, i.e. wire-transfers that have to comply with the law(s) applicable to such wire-transfers. In the relationship between the Parties, only a claim that is governed by the Collateral Arrangements remains and LCH's rights to claim the transfer of cash and to use the Cash as Collateral will be governed by the law chosen to apply to the Collateral Arrangements, i.e. English law (subject to any failed wire-transfer that would trigger any claims for restitution under the law(s) applicable to such wire-transfer). 262

(d) Act of Disposition - Securities

The Hague Convention on the Law Applicable to Certain Rights in respect of Securities held with an Intermediary ("**Hague Convention**")²¹ has entered into force for Switzerland as of April 1, 2017²². Art. 108 (a) PILA defines Intermediated Securities as securities that are held with an intermediary within the meaning of the Hague Convention and Art. 108 (c) PILA stipulates that the Hague Convention applies as to the law applicable to Intermediated Securities. Pursuant to the Hague Convention any securities, such as any shares, bonds or other financial instruments or financial assets (other than cash), or any interest therein, which are held with an intermediary qualify as Intermediated Securities under the Hague Convention. The Hague Convention defines Intermediated Securities ("*securities held with an intermediary*") as the rights of an account holder resulting from the credit of securities to a securities account. The Hague Convention and thereby Art. 108 (a)-(d) PILA solely deal with the creation of a security interest (act of disposition) in Intermediated Securities not the security undertaking, which remains governed by Art. 116 PILA. Where security collateral consists of Intermediated Securities, Art. 108 (a)-(d) PILA are applicable to the exclusion of the other provisions of the PILA dealing with the creation of security interests in security collateral other than Intermediated Securities. Hence, for purposes of the conflicts of law analysis, the first question is whether the security collateral consists of Intermediated Securities:

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- Art. 108 (c) PILA states that the law applicable to Intermediated Securities is determined in accordance with the Hague Convention. 264
- The key provision of the Hague Convention is Art. 4 where it is stated that, in principle, if the accountholder and the intermediary have expressly agreed on a law in their account agreement, the chosen law governs all the issues that are covered by the Hague Convention, which is the law applicable to the creation of a security interest in intermediated securities.²³ 265

²¹ Übereinkommen vom 5. Juli 2006 über die auf bestimmte Rechte an intermediärverwahrten Wertpapieren anzuwendende Rechtsordnung, SR 0.221.556.1

²² The Swiss legislator had previously introduced the relevant provisions in Art. 108a et seq. PILA. After the entry into force of the Hague Convention, these provisions have remained in place but are now only applicable where the Hague Convention is not.

²³ Art. 4 of the Hague Convention thereby applies a modified version of the place of relevant intermediary approach (PRIMA). Not the law of the state of the location of the securities account, which in practice often times can hardly be determined, but the law the accountholder and the intermediary have agreed on in the account agreement is the law applicable. Though probably of little practical relevance, according to this article, the accountholder and the intermediary could alternatively agree that a different law than the law agreed to govern the account agreement shall govern specifically all those issues that fall within the scope of the Hague Convention.

- In both instances, though, such law only applies if at the time of such choice of law the intermediary has an office qualifying under the Hague Convention in the country of the chosen law (so-called *reality test*). For purposes of the Hague Convention, hence, the choice of law is limited and it is legally speaking a choice made between the accountholder and the intermediary, not between the parties to the security undertaking. 266
- In the context of this opinion, the relevant account to be considered is the securities account of the Relevant Clearing Member if the intermediated securities remain booked to the Relevant Clearing Member securities account, whereas it is the securities account of LCH where the intermediated securities are transferred to the account of LCH to create such security interest, whereas we understand and have assumed for purposes of this Opinion that the Securities Account is an Account of the Relevant Clearing Member subjected to the security interest of LCH under the Deed of Charge. 267
- If no law has been chosen or if the chosen law does not satisfy the requirements of the Hague Convention (see n. 266 above) there is a cascade of laws that may apply in the following order: 268
 - the law applicable at the place of the particular office through which the intermediary acted when entering into the account agreement; 269
 - the law of the relevant intermediary's incorporation or organisation; 270
 - the law of the relevant intermediary (principal) place of business (Art. 4 and 5 Hague Convention). 271

Based on the assumption that the Securities qualify as intermediated securities held in a Securities Account of the Relevant Clearing Member with a Qualifying Intermediary, and assuming that such Securities Account is located in England and is governed by English law, the creation of the security interest would be governed by English law, and we note that such governing law then coincides with English law being applicable to the Deed of Charge. If the Securities Account is located in the United States and is governed by New York law (as contemplated by the Deed of Charge), then the creation of the security interest in such Securities would be governed by New York law, irrespective of the choice of English law to govern the Deed of Charge as such. 272

6.2.2. Realization of Collateral outside Insolvency Proceedings

Absent Insolvency Proceedings against the Relevant Clearing Member, LCH would be free as contemplated by the Collateral Arrangement to foreclose on the Collateral outside any statutory procedure and without need to obtain a prior court order to this end by private realization, be it in the form of a set-off, a sale or appropriation 273

(*Privatverwertung/réalisation privée*), provided that LCH would have to account for such realization and remit any excess proceeds to the Relevant Clearing Member.

6.2.3. Realization of Collateral in case of Insolvency Proceedings

(a) In General

Assets of which ownership has been transferred to LCH as secured party under the Collateral Arrangements as a result of a security interest that would for Swiss law purposes (including Swiss Insolvency Proceedings) be treated as an irregular pledge (see n. 257 et seq. above) or on a title transfer basis (see n. 260 below) would not form part of the bankruptcy estate of the Relevant Clearing Member and the realization of such assets would not be effected through the receiver in bankruptcy. LCH as secured party would realize such Collateral outside official realization proceedings through private realization (*Privatverwertung/réalisation privée*), including set-off, appropriation or sale, but would need to account for the sales proceeds and remit any excess sales proceeds to the receiver in bankruptcy (*Abrechnungspflicht/obligation de rendre compte*).

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Assets over which the Relevant Clearing Member has granted a security interest that would for Swiss law purposes (including Swiss Insolvency Proceedings) be treated as a regular pledge (see n. 256) remain its property and would in case of its insolvency be part of its insolvency estate. In a bankruptcy, as a rule, a secured party is under an obligation to remit the pledged assets to the bankruptcy estate. The assets are liquidated by the receiver in bankruptcy in the same manner as the other assets of the bankruptcy estate, but the secured party retains its privilege to be satisfied from the proceeds of the liquidation of the assets pledged to it with priority over the unsecured creditors. With respect to composition proceedings it is held in Swiss legal doctrine (albeit with as we believe valid dissenting views) that the grant of a moratorium (*Nachlassstundung/sursis concordataire*) with a view of entering into a composition agreement (*Nachlassvertrag/concordat*) (composition proceedings are not applicable to Banks and Securities Houses) would not only stay the initiation of debt enforcement proceedings aiming at a realization of collateral (*Betreibung auf Pfandverwertung/poursuite en réalisation de gage*), but also a private realization of such collateral where the security arrangement allows such private realization. Furthermore, we note, that there are some authors that based on the wording of Art. 324 SDEBA hold that the terms of a composition agreement with assignment of assets (*Nachlassvertrag mit Vermögensabtretung/concordat par abandon d'actifs*) could provide for a further stay²⁴.

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²⁴ This is, in our view rightfully, contested by other authors on the basis that secured creditors are not parties to such composition agreement. If contrary to the latter view, one were to contemplate such a stay, then it would need to be based on interest of the security provider to postpone such realization that are clearly outweighing the security takers interest to realize such collateral, which we do not see as a realistic scenario for collateral of the type of the Collateral provided in the context of Contracts.

As an exception to these limitations of a private realization in the case of Insolvency Proceedings of Collateral provided under a regular pledge, a private realization would still be available based on the following particular provisions that take precedence over the principles set out above:

- in the case of book-entry securities, i.e. intermediated securities within the meaning of the BESA, Art. 31 BESA allows such private realization even though the security interest would be treated as a regular pledge for Swiss law purposes (including Insolvency Proceedings) (see n. 102). The BESA also applies to intermediated securities governed by foreign law, and based on the newly introduced Art. 3 para. 1^{bis} that came into effect on January 1, 2016, the application of Art. 31 BESA has been extended to intermediated securities and other financial instruments having an equivalent function and that are deposited in a securities account outside Switzerland under foreign law; 276
- where the party subject to Insolvency Proceedings is a Bank or Securities House, and the collateral arrangement agreed up-front provides for a private realization also in the context of a security interest that would be treated for Swiss law purposes (including Insolvency Proceedings) as a regular pledge (see n. 256), such right to a private realization may pursuant to Art. 27 para. 1 lit. b Banking Act and Art. 18 BIO-FINMA still be exercised by the secured party, where the collateral consists of securities for which an objective value can be established (see n. 124). It is held that this would also apply to Cash (where such Cash is not transferred under a title transfer, but merely pledged) in that Cash would be treated as other financial instrument within the meaning of Art. 27 para. 1 lit. b Banking Act. The secured party has to inform the receiver in bankruptcy that it holds collateral, though, and must evidence its right to a private realization, which typically will be done by providing a copy of the respective collateral arrangement providing for such right; and 277
- where the party subject to Insolvency Proceedings is a direct clearing member of a CCP, Art. 90 para. 1 lit. b FMIA provides for the same safeguards as Art. 27 para 1 lit. b Banking Act. In our view such safeguards apply irrespective of whether the direct clearing member is a Bank, Securities House or an unregulated Corporation and it also applies to a foreign CCP (see n. 140 et seq.). As mentioned, though no precedents or authoritative guidance are at this point available with respect to the scope of application discussed above (see n. 146). It is held in respect of Banks and Securities Houses under Art. 27 para. 1 lit. b Banking Act this would also apply to Cash (as other financial instrument; where such Cash is not transferred under a title transfer, but merely pledged). When applied to a Bank or Securities House, such safeguards are subject to the stay of termination rights pursuant to Art. 30a Banking Act (see n. 126 et seq.). 278

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In order to determine whether the private realization, including set-off, appropriation and sale, provided for under the Collateral Arrangements could be enforced in case of Insolvency Proceedings against the Relevant Clearing Member, one, hence, first needs to establish how the relevant security interest granted in the Collateral under the Collateral Arrangement would be treated for Swiss law purposes (including Insolvency Proceedings).

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(i) *Enforcement of Charged Property under the Deed of Charge*

The creation of a security interest in the Securities under the Deed of Charge would, under Swiss law concepts, in our view be addressed as a regular pledge (limited right approach) (*reguläres Pfandrecht/droit de gage régulier*) if under English or New York law that governs the security interest, the creation of such security interest by way of a first security interest in the Securities in favour of LCH (as we understand and have for purposes of this opinion assumed to be the case) does not result in the transfer of legal title to such Securities and where LCH has no right of disposal prior to enforcement (including no right of rehypothecation) and in the absence of such realization and discharge of the security interest would have to return the Securities remitted to it rather than to have an obligation to return equivalent Securities only.

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However, the Relevant Clearing Member would (i) either be a Bank or Securities House to which Art. 27 para. 1 lit. b Banking Act and Art. 18 BIO-FINMA applies, or (ii) whether it is a Bank, a Securities House or an unregulated Corporation, be a direct clearing member of LCH, to which in our view Art. 90 lit. b FMIA providing for the same safeguards as Art. 27 para. 1 lit. b Banking Act. To the extent that Collateral constitutes Securities that as per our assumptions are intermediated securities the value of which can be objectively determined, such Securities could still be privately realized by LCH in case of Insolvency Proceedings against the Relevant Clearing Member. When applied to a Bank or Securities House, such safeguards are subject to the stay of termination rights pursuant to Art. 30a Banking Act (see n. 126 et seq.).

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(ii) *Realization/Application of Cash*

In the case of Title Transfer Cash, such Cash would not constitute assets of bankruptcy estate of the Relevant Clearing Member. Based on the assumption that such Cash would not be transferred or held in an account of the Relevant Clearing Member but in an account of LCH the act of disposition consists of a chain of payments, i.e. wire-transfers that have to comply with the law(s) applicable to such wire-transfers. In the relationship between the Parties, only a claim that is governed by the Collateral Arrangements remains and LCH's rights to claim the transfer of cash and to use the cash as collateral will be governed by English law as the law applicable to the LCH Agreements and the Collateral Arrangements in respect of Cash (subject to any failed wire-transfer that would trigger any claims for restitution under the law(s) applicable to such wire-transfer).

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We understand that realization would be based on set-off of the Cash restitution claim of the Relevant Clearing Member against LCH with any (accelerated) obligation of the Relevant Clearing Member to LCH. As discussed above, set-off remains available in case of an Insolvency Event having occurred with respect to the Relevant Clearing Member, subject to the limitations of Art. 213 and 214 SDEBA (see n. 97 and 187 for a bankruptcy and 112 for composition proceedings).

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(b) Limitations on Enforcement and Realization

(i) *Banks and Securities Houses*

We note that with respect to Banks and Securities Houses, the FINMA could order a temporary stay of termination right pursuant to Art. 30a Banking Act (see n. 126 et seq.) in connection with protective or reorganization measures for such Bank or Securities Houses or more generally any measure that would postpone the maturity of claims against such Banks or Securities Houses, which in effect would then prevent LCH to enforce and realize its Collateral. Where an Insolvency Event has occurred, i.e. a bankruptcy has been declared under Art. 33 Banking Act against such Bank or Securities House, though, LCH could then again realize and enforce Collateral.

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7. Client Clearing

7.1. Scope of Opinion and relevant Fact Pattern

It is contemplated that Relevant Clearing Members will be entitled to offer Client Clearing Services to their Clearing Clients in accordance with the provisions of the Rulebook (including, in particular, Regulation 11 and the Client Clearing Annex to the Default Rules).

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We understand that LCH requires legal advice as to whether the default arrangements providing for:

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- the porting of the Contracts entered into on behalf of a Clearing Client ("**Client Contracts**") and the associated Account Balance to a Backup Clearing Member; or
- the liquidation of Client Contracts and the return of the relevant Client Clearing Entitlement directly to the relevant Clearing Client or (failing that) to the relevant Defaulter for the account of such client,

would be effective in the event of a Default of a Relevant Clearing Member in Switzerland, whereby the porting of Client Contracts may be effected by either:

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- a close-out of the relevant Client Contracts between LCH and the Defaulter followed by the replication of such Contracts (by the opening of new Client Contracts on the same terms) between LCH and the Backup Clearing Member ("**Economic**

Porting"); or

- a transfer of the relevant Client Contracts (in the form of open positions and without close-out) from the Defaulter to the Backup Clearing Member ("**Legal Porting**"); provided that

in all cases where LCH returns a Client Clearing Entitlement to a Defaulter for the account of a Clearing Client, one cannot assume that the relevant Clearing Client will: 289

- have taken enforcement action under the Security Deed;
- have instructed LCH to take that course of action; and/or
- necessarily even be known to LCH.

In these circumstances, LCH will return the Client Clearing Entitlement to the Defaulter on the basis that the relevant assets are assets of the Clearing Client and should be treated as such. 290

7.2. Swiss law provisions - Exempting Client Clearing Rules

Para. 7 Question 1: Please opine on the availability and effectiveness of any law, regulation or statutory provision (having the force of law) in the Relevant Jurisdiction which (if so designated by LCH) would be expected to qualify as an Exempting Client Clearing Rule. Please clarify whether the relevant Exempting Client Clearing Rule would be expected to apply to Relevant Clearing Members of all entity types or to only certain entity types. If, and to the extent that, you consider such an Exempting Client Clearing Rule to be available, please: (i) assume for the purposes of answering the following questions that LCH will rely upon the existence of the relevant Exempting Client Clearing Rule and will not require those Relevant Clearing Members to which that Exempting Client Clearing Rule applies to enter into a Security Deed; and (ii) ignore questions 3.12 to 3.14.

The following rules under Swiss law would in our view constitute Exempting Client Clearing Rules. 291

7.2.1. Safeguards of Art. 27 para. 1 lit. c Banking Act (Banks and Securities House)

(a) Rule

With respect to Banks and Securities Houses Art. 27 para. 1 lit. c Banking Act provides that porting rules would take precedence over Insolvency Proceedings, which in the case of Banks and Securities Houses comprise protective measures, reorganization measures and the bankruptcy of such Banks and Securities Houses. Art. 27 para. 1 lit. c Banking Act which entered into force on January 1, 2016 at the same time as the FMIA is of general applicability, i.e. it is not linked to a Bank or a Securities House status as a clearing member of a CCP or cleared transactions. It is quite evident, though, from the legislative history that it specifically aims at protecting porting rules that are typically found in rules and regulations of a CCP. It is also clear that porting as contemplated by Art. 27 para. 1 lit. c Banking Act 292

covers both Economic Porting and Legal Porting.

(b) Stay

As a rule, the porting safeguards apply to all Insolvency Proceedings, i.e. protective measures, reorganization measures and bankruptcy of Banks and Securities Houses (Art. 27 para. 1 lit. c Banking Act). As an exception, though, a stay of termination rights under Art. 30a Banking Act takes precedence over porting rights, where such stay has been ordered by the FINMA, which it may only do in connection with protective measures and reorganization measures but not in case of an Insolvency Event, i.e. a bankruptcy having been declared with respect to a Bank or Securities House (Art. 27 para. 2 in conjunction with Art. 30a Banking Act).

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7.2.2. Safeguards of Art. 90 para. 1 lit. c FMIA (Clearing Members of a CCP)

(a) Rule

With respect to cleared transactions of direct participants of a CCP, Art. 90 para. 1 lit. c FMIA provides for the same safeguards as discussed above with respect to Art. 27 para. 1 lit. c Banking Act.

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The link to the porting rules of a CCP is quite obvious, in that their safeguard is predicated upon a party being a direct participant of a CCP.

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Art. 90 para. 2 FMIA states that any residual claim of the direct participant, after the exercise by the CCP of its netting, private realization of collateral and porting rights pursuant to Art. 90 para. 1 FMIA shall be segregated in favor of the clearing member's indirect participants and clients (we note that the distinction being made between indirect participants (i.e. an indirect clearing member) and a client (i.e. a client acting for its own account) has no legal and practical consequences for purposes of Art. 90 FMIA). While not specifically addressed, in our view such segregation only applies to client contracts and not proprietary contracts (if the latter have been clearly segregated from client contracts).

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As set out above, in our view Art. 90 FMIA is not limited to regulated Corporations such as Banks or Securities Houses, but extends to any direct participant of a CCP. Hence, in our view these safeguards also apply to unregulated Corporations which are direct participants of a CCP. We note, though, that third party client clearing will as a rule be taken care of by Banks and Securities Houses.

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As further set out above (n 141 et seq.), in our view Art. 90 FMIA is not either limited to circumstances where a party is a direct participant of a Swiss CCP licensed under the FMIA, but also applies to a foreign CCP and in the case of such foreign CCP without further distinction being made whether such foreign CCP is recognized under the FMIA or supervised in Switzerland or not.

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Hence, in our view all Relevant Clearing Members of LCH would fall under Art. 90 para. 1 lit. c FMIA and thereby afford such protection to the porting rules under the LCH Agreements. 299

As mentioned, though, no precedents or authoritative guidance are at this point available with respect to the scope of application discussed above (see n. 146). 300

(b) Stay

Art. 90 para. 3 FMIA then replicates what is said in Art. 27 para. 2 Banking Act: As an exception to the rule pursuant to which the safeguards of Art. 90 para. 1 FMIA take precedence over any Insolvency Proceedings, a stay of termination rights and as a consequence the stay of netting rights, private collateral realization rights and porting rights pursuant to Art. 30a Banking Act takes precedence over the safeguards provided for in Art. 90 para. 1 FMIA. As set out above (see n. 126 et seq.) such stay would, however, not apply or continue in case of a bankruptcy having been declared with respect to a Bank or Securities House. 301

7.3. Default Outside Insolvency Proceedings

Para. 7 Question 2: If LCH were to: (i) declare a Relevant Clearing Member to be in Default in circumstances other than the commencement of Insolvency Proceedings or Reorganisation Measures in respect of that clearing member; and (ii) seek to port the Client Contracts and Account Balance of a Clearing Client to a Backup Clearing Member as a result, could the Relevant Clearing Member or any other person successfully challenge the actions of LCH and claim for the amount of the Account Balance?

The LCH Agreements and Contracts entered thereunder, including the porting measures provided thereunder, are governed by English law. The choice of English law by the Parties to the LCH Agreements and Contracts is legal, valid and binding on the Relevant Clearing Member (Art. 105, 116, 145 and 148 PILA). A Swiss court, hence, would need to apply English law to any contract matters of the LCH Agreements and Contracts including the porting of Contracts and the Account Balance in favour of a Clearing Client of the Relevant Clearing Member. 302

To the extent that such porting of Client Contracts and Account Balance in favour of the Clearing Client are legal, valid, binding and enforceable as a matter of English law, such porting of Client Contracts and Account Balance of a Clearing Client would outside Insolvency Proceedings against the Relevant Clearing Member also be legal, valid, binding and enforceable against the Relevant Clearing Member, subject to any restrictions of Swiss public policy. 303

We understand and have assumed for purposes of this Opinion that such porting of a Client Contract and Account Balance would not under English law result in any shift of a benefit to which the Relevant Clearing Member would be entitled or a loss that would need to be 304

suffered by the Clearing Client as between the Relevant Clearing Member and the Clearing Client without the Relevant Clearing Member having a compensating claim against the Clearing Client.

Based thereon and on the face of the LCH Agreements we have not identified any provisions of the LCH Agreements dealing with the porting of Client Contracts and Account Balances of Clearing Clients that would violate Swiss public policy.

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Para. 7 Question 3: If LCH were to: (i) declare a Relevant Clearing Member to be in Default in circumstances other than the commencement of Insolvency Proceedings or Reorganisation Measures in respect of that clearing member; and (ii) seek to return the Client Clearing Entitlement to the relevant Clearing Client or to the Defaulter for the account of such client, could the Relevant Clearing Member or any other person successfully challenge the actions of LCH and claim for the amount of the Client Clearing Entitlement?

The LCH Agreements and Contracts entered thereunder, including the exercise of rights against the Relevant Clearing Member upon its Default and the return of any resulting Client Clearing Entitlement provided thereunder, are governed by English law. The choice of English law by the Parties to the LCH Agreements and Contracts is legal, valid and binding on the Relevant Clearing Member (Art. 105, 116, 145 and 148 PILA). A Swiss court, hence, would need to apply English law to any contract matters of the LCH Agreements including the exercise of rights against the Relevant Clearing Member upon its Default and the return of any resulting Client Clearing Entitlement provided thereunder.

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To the extent that exercise of rights against the Relevant Clearing Member upon its Default and the return of any resulting Client Clearing Entitlement provided thereunder is legal, valid, binding and enforceable as a matter of English law, such exercise of rights against the Relevant Clearing Member upon its Default and the return of any resulting Client Clearing Entitlement provided thereunder would outside Insolvency Proceedings against the Relevant Clearing Member also be legal, valid, binding and enforceable against the Relevant Clearing Member, subject to any restrictions of Swiss public policy.

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We understand and have assumed for purposes of this Opinion that the return of any resulting Client Clearing Entitlement would not under English law result in any shift of a benefit to which the Relevant Clearing Member would be entitled or a loss that would need to be suffered by the Clearing Client as between the Relevant Clearing Member and the Clearing Client without the Relevant Clearing Member having a compensating claim against the Clearing Client.

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English law would also apply to the question whether by returning such Client Clearing Entitlement to either the Clearing Client or the Defaulter for the account of the Clearing Client LCH would duly discharge its obligations under the LCH Agreements.

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7.4. Insolvency-related Default

Para. 7 Question 4: If: (i) following the commencement of Insolvency Proceedings, a Relevant Clearing Member was designated a Defaulter (whether due to the delivery of a Default Notice or (if applicable) the occurrence of an Automatic Early Termination Event); and (ii) LCH were to seek to port the Client Contracts and Account Balance of a Clearing Client to a Backup Clearing Member as a result, could an insolvency officer appointed to the Defaulter or any other person successfully challenge the actions of LCH and claim for the amount of the Account Balance?

Para. 7 Question 5: If: (i) following the commencement of Insolvency Proceedings, a Relevant Clearing Member was designated a Defaulter (whether due to the delivery of a Default Notice or (if applicable) the occurrence of an Automatic Early Termination Event); and (ii) LCH were to seek to return the Client Clearing Entitlement to the relevant Clearing Client or to the Defaulter for the account of such client, could an insolvency officer appointed to the Defaulter or any other person successfully challenge the actions of LCH and claim for the amount of the Client Clearing Entitlement?

7.4.1. Principle - Effects of Insolvency Events

(a) Loss of Capacity to Dispose

Upon the declaration of a bankruptcy with respect to a Relevant Clearing Member, the Relevant Clearing Member loses its capacity to dispose of its assets and liabilities (see n. 91). This applies both to a bankruptcy under the SDEBA with respect to an unregulated Corporation and to a bankruptcy under the Banking Act with respect to a Bank or Securities House. With the grant of a moratorium to initiate a composition agreement with respect to a Relevant Clearing Member (other than a Bank or Securities House to which composition agreements do not apply) the Relevant Clearing Member's capacity to dispose of its assets and liabilities is restricted. The order of protective measures or reorganization measures may also involve a restriction of a Bank or Securities House's capacity to dispose of its assets.

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As a consequence, Legal Porting of Client Contracts and Account Balances of Clients would not, as a rule (i.e. absent the particular safeguards discussed above, see n. 294 et seq. and below, see n. 315 et seq.), be effective against the Relevant Clearing Member in case of Insolvency Proceedings.

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A mere Economic Porting in turn consists of a close-out of Client Contracts as between LCH and the Relevant Clearing Member (for a discussion of close-out and the impact of Insolvency Proceedings thereon see paragraph 5.3 above) and entering into a replicating Contract with the Backup Clearing Member, which does not involve the Relevant Clearing Member. The loss or restriction of the Relevant Clearing Member's capacity to dispose of its assets and liabilities would, hence, not affect a mere Economic Porting.

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7.4.2. No right to privately realize security interest

Upon the declaration of a bankruptcy as a rule a security interest that would be treated as a regular pledge for purposes of Swiss law (including Insolvency Proceedings) could not any longer be privately realized and may be stayed in case of a moratorium under composition proceedings (see n. 275). The security interest in the Account Balance (being contractual rights of the Relevant Clearing Member against LCH) would be treated as a regular pledge and would not be treated as securities or other financial instruments to which any of the safeguards of Art. 27 para. 1 lit. b Banking Act, Art. 31 BESA or Art. 90 para. 1 lit. b FMIA would apply.

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While the Clearing Client would remain a secured party (assuming that the security interest has been validly created and perfected), it could not realize such security interest outside the Insolvency Proceedings. It, therefore, could not be used to facilitate the Legal Porting in due time. It would not either allow LCH to return the Client Clearing Entitlement to the Client in due time.

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7.4.3. Safeguards for Porting under Swiss law

As set out above, Art. 27 para. 1 lit. c Banking Act and Art. 90 para. 1 lit. c FMIA provide for specific safeguards of porting. Art. 27 para. 1 lit. c Banking Act applies to Banks and Securities Houses generally and Art. 90 para. 1 lit. c FMIA to Banks, Securities Houses and in our view also unregulated Corporations that are direct participants (clearing members) of a Swiss CCP licensed under the FMIA and in our view also in case of a membership in a foreign CCP and in the case of such foreign CCP without further distinction being made whether such foreign CCP is recognized under the FMIA or supervised in Switzerland or not. These safeguards would allow the porting of Client Contracts and Account Balances also where this porting amounts to Legal Porting that would be otherwise precluded in case of Insolvency Proceedings. Porting being described as the transfer of assets and liabilities as well as collateral consisting of securities or financial instruments the value of which can be objectively determined, in our view there are valid arguments for allowing the return of the Client Clearing Entitlement to the Clearing Client as a transfer of assets.

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Pursuant to Art. 90 para. 2 FMIA any balance in favour of a direct participant in such CCP is then to be segregated in favour of a direct participant's clients. This would in our view also allow LCH in effect to return the Client Clearing Entitlement to the Clearing Client or to the Insolvency Receiver of the Relevant Clearing Member for the account of its Clearing Clients.

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These safeguards take precedence over any Insolvency Proceedings, whether under the Banking Act against a Bank or Securities House (there including protective measures, reorganization measures and the insolvent liquidation) or the SDEBA (there including

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bankruptcy and composition proceedings) in respect of an unregulated Corporation.

In relation to Banks and Securities Houses, though, a stay of termination rights applies and as a result thereof the exercise of netting, private realization of collateral and porting rights, pursuant to Art. 30a Banking Act would take precedence over these safeguards and prevent or delay both Legal Porting and Economic Porting (see n. 141 et seq.).

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8. Settlement Finality

Para. 8 Question 1: Would the commencement of Insolvency Proceedings in respect of a Relevant Clearing Member affect the finality of settlement of a Payment Transfer Order, including the corresponding transfer of funds, from the Relevant Clearing Member to LCH through a Settlement Services Provider or PPS Bank (or both)? If so, please clarify from which point in time and in which circumstances finality protections in respect of such settlement would be lost.

Para. 8 Question 2: Would the commencement of Insolvency Proceedings in respect of a Relevant Clearing Member affect the finality of settlement of a Securities Transfer Order, including the corresponding transfer of securities, from the Relevant Clearing Member to LCH through a Securities System Operator? If so, please clarify from which point in time and in which circumstances finality protections in respect of such settlement would be lost.

Para. 8 Question 3: Are there any circumstances (such as the commencement of reorganisation measures) which might give rise to a loss of finality protections before the commencement of Insolvency Proceedings? If so, please clarify from which point in time and in which circumstances finality protections would be lost.

8.1. Summary and Discussion of the Relevant Provisions

8.1.1. Art. 470 of the Code of Obligations

With the declaration of bankruptcy the Relevant Clearing Member pursuant to Art. 204 SDEBA loses the capacity to dispose of its assets (see n. 310) and any instructions, mandates or powers granted or given by the Insolvent Relevant Clearing Member would fall away. The same applies by analogy, where applicable, with the confirmation of a composition agreement with assignment of assets and the discussion below, hence, applies to such confirmation as well. Some authors are in favour of such later point in time when the recipient of instructions, mandates or powers in good faith gets knowledge of the bankruptcy (actual knowledge or deemed knowledge, i.e. where using the requisite diligence it should have known). With respect to the revocation of instructions, Art. 470 para. 3 of the Swiss Code of Obligations ("CO") stipulates that any instruction that has not been accepted (and thereby become irrevocable) by the time of a bankruptcy, is deemed automatically revoked as of such time the insolvency has been declared. There is some controversy in respect of the time such revocation is to take effect. A minority view is that it should take effect as of the declaration of the bankruptcy, whereas a majority holds that the revocation takes effect when

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the instructed person has actual knowledge or in good faith should have known of the bankruptcy, provided that with the official publication of the bankruptcy there is a fiction of knowledge of such publication and, hence, the declaration of bankruptcy. There is a further subdivision in this majority view that holds that while the revocation as such would take effect as of the time of the declaration of the bankruptcy, any subsequent acting of the instructed party would be protected under general principles applicable to a mandate and/or an analogous application of Art. 205 SDEBA. We note that in the context of an entity regulated by FINMA, in particular a bank or a securities house, Art. 89 para. 1 FMIA imposes an obligation on FINMA insofar as this is possible and to the extent that they are concerned, to inform CCPs, central securities depositories and payments systems both in Switzerland and abroad of the time and type of insolvency measure it intends to take (cf. n. 135), so that it would be generally difficult to argue that the declaration of bankruptcy was not or needed not be known.

Art. 470 para. 3 CO deals with the revocability of instructions given prior to the bankruptcy, while instructions given after the bankruptcy would be invalid based on Art. 204 SDEBA. 320

Art. 470 CO para. 2^{bis} CO states that unless the regulations of a payment system provide otherwise, a payment instruction in a cashless transaction (meaning a transfer of cash by wire as opposed to remittance of physical means of payment) becomes irrevocable as soon as the transfer amount is debited from the principal's account. 321

This is a more recent and particular rule for wire transfers of cash, in that it treats a payment instruction as irrevocable upon the account bank acting upon such instruction and debiting the account of the principal. 322

The basic rule under Art. 470 para. 1 CO would be that the principal may revoke a payment instruction (i) as against the payee at any time unless the instruction is given in order to redeem a debt to the payee or otherwise in favour of the latter and (ii) as against the instructed person (e.g. an account bank) at any time unless the instructed party has notified the payee of his acceptance of the instruction (Art. 470 para. 2). The rationale behind the latter rule is that with the notification of such acceptance, the instructed party becomes the direct obligor of the payee under an obligation of its own and, hence, would have to pay irrespective of a revocation of the instruction by the principal. In order to avoid such a situation where the instructed person has to make payment but would lose its indemnification right against the principal, the instruction cannot in effect be revoked any longer. 323

Before the introduction of para. 2^{bis} to Art. 470, it was held that unless the instructed bank had notified the payee of its acceptance, the instruction could have been revoked until such time as the money was credited to the account of the payee. In case of such revocation, the instructed bank, having used further banks in the payment chain or a payment system, would have had to communicate such revocation so that it would be communicated throughout the chain. Where a payment would not have been recoverable due to having become final in part of the interbank chain, though, it was held that the risk of such lack of recovery would have 324

been for the instructing principal as long as all persons in the chain had acted in good faith before learning of the revocation. The qualification of payment chains as such – the prevailing view treats such chain as a chain bearing elements of mandates (*Auftragsrecht*) and instructions (*Anweisungen*) – and the ramifications of a revocation of an erroneous instruction was subject to quite some debate and the consequences set-out above seem quite cumbersome if at all timely feasible against the background of an automated payment chain.

We think that with the introduction of Art. 470 para. 2^{bis} CO much of the debate has lost its practical relevance in respect of the question of irrevocability of the instruction at the level of the principal with respect to the instructed bank or banks in that irrevocability is being brought forward to the point in time when the principal's account is debited. According to the Swiss Federal Council's message to the new provision, this also applies to automated payment chains across multiple links in that the point in time the instruction becomes irrevocable down the entire payment chain is set at the debiting of the principal's account so that any intermediary along the chain need not be concerned with any intervening revocation after that point. Where the wire transfer is made using a payment system, the payment system may establish other rules for finality that would take precedence over the rule of Art. 470 para. 2^{bis} CO.

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It is not clear from the face of it whether Art. 470 para. 2^{bis} CO speaks to both a voluntary revocation by the principal as well as a declaration of bankruptcy of the principal and hence brings forward the point in time when an instruction is no longer affected by either a revocation or a declaration of bankruptcy as to the principal. There is scarce literature as of to date with respect to Art. 470 para. 2^{bis} CO and as far as we can see no court precedent. There is only one author that specifically addresses the very issue with respect to Art. 470 para. 2^{bis} CO holding that with the irrevocability stipulated by this provision the instruction must also remain unaffected by any declaration of bankruptcy of the principal and hence that the relevant point in time is brought forward also for that latter case to the point in time when the account of the principal is being debited. An intervening bankruptcy accordingly could not be held against the instructed bank after such debiting of the principal's account.

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The author is, however, not entirely clear as to whether this irrevocability under Art. 470 para. 2^{bis} CO in case of a bankruptcy should also be for the benefit of the payee so that the payment ultimately being credited to its account based on an instruction that has become irrevocable and remains irrevocable in case of a bankruptcy could not any longer be affected by an intervening bankruptcy once the principal's account has been debited.

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The author in turn holds that Art. 470 para. 2^{bis} CO only addresses the irrevocability of instructions for purposes of Art. 470 para. 3 CO where the instructing principal gave the instruction prior to the declaration of bankruptcy, while an instruction given after the declaration of bankruptcy would be invalid due to the loss of capacity to make any disposition based on Art. 204 SDEBA. This, pursuant to that author, by contrast to the situation under former Art. 27 para. 2 of the Banking Act (that has since been translated into

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Art. 89 para. 2 FMIA, see the discussion below) that stipulates that a payment remains effective even if brought into the payment system after an insolvency measure (which includes a bankruptcy) has been taken, provided that the payment system in good faith processes the payment in the course of the day on which the insolvency measure has been taken, i.e. the payment system did not and was not under obligation to know of the insolvency measure (as set-out below). One could argue that Art. 470 para. 2^{bis} CO was also introduced with the aim of protecting the payment system or at least payment chains, so that it should have the same protective scope as Art. 89 para. 2 FMIA, but as the wording of Art. 470 para. 2^{bis} CO only addresses irrevocability, there is indeed a discrepancy to the wording of Art. 89 para. 2 FMIA in this respect.

We think, that indeed with the introduction of Art. 470 para. 2^{bis} CO, the legislator intended to protect and enhance the overall stability of payment systems and that, therefore, it did not only mean to limit in time a voluntary revocation of the instruction by the principal, but also intended to determine the point in time where for purposes of Art. 470 para. 3 CO an intervening bankruptcy could not any longer terminate the instruction. This in our view is also evidenced by the fact that Art. 470 para. 2^{bis} CO reserves the rules of a payment system with respect to the irrevocability, where the wire transfer is being made using such payment system, but in our understanding not only means irrevocability, but also finality (as can be seen in Art. 89 para. 2 FMIA).

We further believe that with this legislative intention in mind there are also good arguments that Art. 470 para. 2^{bis} CO should also benefit the payee that receives payment that was instructed by the principal prior to its bankruptcy and executed on the basis of a payment instruction that has become and pursuant to the view expressed herein should remain irrevocable under Art. 470 para. 2^{bis} CO. In turn we do not think that Art. 470 para. 2^{bis} CO is likely to be applied to an instruction that has been given after a bankruptcy.

Finally, there is one, albeit quite old source, that when discussing the point in time when an instruction becomes irrevocable for purposes of Art. 470 para. 3 CO holds that if the instructed party was in good faith not aware of the bankruptcy when making the payment, but the payee at such time of the acceptance was aware of the bankruptcy, the payee would have to remit the payment received to the receiver in bankruptcy of the principal, without, however, giving any particular reasons therefor. We are not sure that knowledge actual or deemed in good faith is relevant, though. Contrary to the instructed party the payee does not make any disposition based on the instruction that may have been revoked based on the bankruptcy and does not need that particular protection. As a result we think that contrary to the instructed person acting on the instruction, the payee's knowledge of the bankruptcy is not relevant for Art. 470 para. 2^{bis} CO or Art. 470 para. 3 CO.

If contrary to the views expressed herein, Art. 470 para. 2^{bis} CO only dealt with the voluntary revocation of the instruction by the principal, or, while also applicable with respect to the point in time until which a bankruptcy would revoke a payment instruction, it were only held

to be applicable with respect to the instructed banks along the payment chain, then the relevant point in time for the finality of the payment to the payee would be the credit of the payment on the account designated by the payee as the account to which the principal has to pay in order to discharge its payment obligation. If Art. 470 para. 2^{bis} CO were not applicable at all in a bankruptcy of the principal, Art. 470 para. 3 CO would as prior to the introduction of Art. 470 para. 2^{bis} CO govern the irrevocability of the instruction and the credit of the payment to the account of the payee (under the doctrine relating to payments along a payment chain under Art. 470 para. 3 CO) would constitute the relevant acceptance. We note that for Art. 470 para. 3 CO the question whether it only protects the instructed person or also the payee is not clearly addressed in doctrine. Implicitly the cited older source assumes this to be the case, albeit subject to the payee not being in bad faith at such point of the acceptance in that it knew or should have known about the bankruptcy. If it were not, and as we do not think that the payee's knowledge is relevant in that it need not be protected for acting on the instruction that would have been revoked by the bankruptcy, it may be that the payee would have to return a payment based on the fact alone that the credit was made after the declaration of the bankruptcy of the principal.

8.1.2. Art. 89 para. 2 FMIA

Pursuant to Art. 89 para. 2 FMIA instructions given to a CCP, a central securities depository or payment system by a participant against which an insolvency measure has been taken shall be legally enforceable and binding on third parties if (a) they were introduced before the measure was ordered and were unalterable in accordance with the rules of the respective financial market infrastructure or (b) were executed on the business day defined by the rules of the financial market infrastructure during which the measure was ordered and the financial market infrastructure proves that it was not and should not have been aware of the measure being ordered. As FINMA is pursuant to Art. 89 para. 1 FMIA legally obligated (insofar as this is possible) to pre-announce insolvency measures to the affected CCPs, central securities depositories and payment systems both in Switzerland and abroad, the financial market infrastructure will as a rule not be able to claim such unawareness, however (cf. n. 135). On the upside, such pre-announcement would give the affected financial market infrastructures a short timeframe to prepare for the imminent insolvency of a market participant and thus avoid as much as possible any disruption of their infrastructure.

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The term insolvency measures (*Insolvenzmassnahmen/mesures en cas d'insolvabilité*) needs to be interpreted broadly to include not only Insolvency Proceedings under the Banking Act but also protective and reorganization measures that FINMA could order against a Bank or Securities House ahead of eventually declaring a bankruptcy against a Bank or Securities House. Direct participants in such market infrastructures are not limited to Banks or Securities Houses. Hence, in our view the finality protection provided for in Art. 89 para. 2 FMIA also applies to unregulated Corporations and Insolvency Proceedings against such

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unregulated Corporations under the SDEBA. This in our view holds true irrespective of the fact that the use of the term "such an insolvency measure" suggests a reference to Art. 89 para. 1 FMIA that deals with the obligation of FINMA to inform any Swiss or foreign market infrastructure of an insolvency measure that it [FINMA] orders against a participant. As the powers of FINMA are limited to ordering such insolvency measures against financial participants licensed by FINMA, one could infer that only insolvency measures against such regulated participants are targeted by Art. 89 para. 2 FMIA, which, however, in our view is not the case. Based on the rationale of this provision to provide for systemic protection and the fact that participants are not limited to regulated participants, the finality protection must also apply to non regulated participants. We note, though, that there are no court precedents or authoritative guidance on this very point to date.

The scope of application is, however, somewhat limited with respect to foreign financial market infrastructures in that it only applies where the financial market infrastructure is recognized or supervised in Switzerland and grants Swiss participants direct access to its facilities; or where the participation agreement is subject to Swiss law. 335

Within these parameters of Art. 89 para. 2 FMIA affords Finality Protection to a foreign financial market infrastructure, such as a central counterparty, a central securities depository or payment system, provided that such foreign financial market infrastructure is recognized by FINMA as such foreign financial market infrastructure or is supervised by the Swiss National Bank as systemically relevant financial market infrastructure. 336

LCH has been recognized by FINMA as a foreign central counterparty in Switzerland.²⁵ We further understand from LCH that it is supervised by SNB as a systemically relevant financial market infrastructure. Based thereon, LCH can rely on Art. 89 para. 2 FMIA for instructions given by a Relevant Clearing Member to LCH as central counterparty. 337

8.2. Implications on the Finality of Payments made outside the Protected Payment System of LCH

8.2.1. Unlikely application of safeguards of Art. 89 FMIA to Payment Instruction by a Member

In our understanding and relying on the definitions in the Finality Rules in terms of Payment Transfer Orders and Participants (as defined therein), instructions given by, inter alia, a member of LCH's Clearing Service (the "**Member**") to a party that is not legally related to LCH (e.g. account bank of a Member (the "**Member Bank**")) are treated as Payment Transfer Orders. It is not likely from a Swiss law perspective that an instruction of a Member 338

²⁵ <https://finma.ch/en/finma-public/authorised-institutions-individuals-and-products/>, last updated on February 19, 2020.

to its Member Bank, the latter not being a party that is legally related to LCH for purposes of the particular payment service rendered to the Member, would be deemed an instruction to a financial market infrastructure according to Art. 89 FMIA and thereby qualify for the benefit of the finality rules as set out in Art. 89 FMIA (see Annex).

We doubt that under the provisions of Art. 89 FMIA it is sufficient for the applicability of the finality rules of LCH that these LCH rules define such instruction of a Member to its Member Bank as an instruction of the Member to LCH as participant in the LCH system. This holds true irrespective of the fact that, for the finality of an instruction itself, Art. 89 FMIA indeed would then look to the LCH finality rules.

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We also note that Art. 89 FMIA enumerates the relevant financial market infrastructures that qualify for such finality benefits as central counterparties, securities systems (central depositories and securities settlement systems) and payment systems, each of which financial market infrastructures is defined as a separate financial market infrastructure, and clearly addresses instructions given by a member of the financial market infrastructure to the respective financial market infrastructure. That in our view determines the scope of Art. 89 FMIA and we do not think that it leaves room to the finality rules of a particular financial market infrastructure to broaden the scope of Art. 89 FMIA by introducing a definition of instructions given to LCH extending beyond what Art. 89 FMIA determines as an instruction to the financial market infrastructure.

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So in our view Art. 89 FMIA for its application calls (i) for an instruction to a CCP (payment or security transfer), that is given by a clearing member of such CCP to the CCP, (ii) for a payment system (payment) an order of a member of such payment system that is given to such payment system and (iii) for a securities depository or settlement system (security transfer) an order of a member of such securities depository or settlement system to such depository or settlement.

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Since in the case addressed by the LCH Finality Rules the Member only instructs the Member Bank (and the Member Bank confirms such instruction to the Member itself) and not LCH, we have quite some reservations about applying Art. 89 FMIA and thereby the Finality Rules of LCH in relation to a payment instruction given by the Member to the Member Bank, irrespective of the fact that the payment is eventually a payment to be made to LCH.

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With regard to the finality of a payment order, therefore, one should in our view take into account the provisions of Art. 470 CO as discussed under 8.1.1 above where the instructions to the Member Bank are governed by Swiss law, i.e. in the case of a Swiss Member Bank where the banking relationship is governed by Swiss law. Where the Member Bank is a non Swiss resident Bank it is the laws at the place of the Member Bank or the laws governing the relationship to the Member Bank that would govern the instruction and thereby the finality of such payment instructions.

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The below contemplates a Swiss Francs payment to be made by a Member to LCH by transferring money to the account of CLS with the Swiss National Bank ("SNB") designated by LCH to the Member as the account to which the Member may discharge its Swiss Francs payment obligations to LCH and gives an overview of the implications for both LCH and CLS as the settlement agent.

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8.2.2. Finality for wire transfers of a Member of LCH outside the LCH protected payment system

As mentioned above, an instruction for payment transactions by cash wire (other than the instruction of a member of a payment system regulated in Art. 89 FMIA) is regulated in the Swiss Code of Obligations (Art. 470 para. 2^{bis} CO). In case of an instruction given to a payment system, the payment system's rules on finality take precedence over the rule of Art. 470 para. 2^{bis} CO and, in addition, if the payment system is authorized or recognized under the FMIA and the instruction is given by a member of that payment system, would carry the safeguards of Art. 89 FMIA for that particular part of the payment chain.

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(a) *Irrevocability upon Member account debit*

Under the LCH scheme it is assumed that the Relevant Clearing Member would maintain an account with the Member Bank. A payment instruction given by the Relevant Clearing Member as principal to the Member Bank would not benefit from Art. 89 FMIA (see n. 338 et seq.) and thus, pursuant to Art. 470 para. 2^{bis} CO, become irrevocable once the Member Bank debits the Relevant Clearing Member's account in respect of the payment to be made to the CLS account with SNB.

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The Member Bank, in turn, can either make the payment directly to the CLS account with SNB by making a wire transfer to the CLS account with SNB (through the Swiss RTGS payment system SIC) or by instructing SNB to debit the account of the Member Bank with SNB and crediting the CLS account with SNB. Alternatively – although unlikely in the Swiss context for a CHF payment – the Member Bank could instruct another bank to make such payment. At such point in time when the Member Bank gives its payment instruction it will in all likelihood have debited or will simultaneously debit the account of the Relevant Clearing Member and the Relevant Clearing Member's payment instruction will become irrevocable with such debit. In our understanding of Art. 470 para. 2^{bis} CO this would also be the point in time, where an intervening bankruptcy of the Relevant Clearing Member could not any longer terminate the instruction (see n. 326).

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(b) *Alternative scenario: Irrevocability only upon CLS account credit*

If contrary to the view expressed herein, Art. 470 para. 2^{bis} CO only dealt with the revocation of the instruction by the principal (instead of its bankruptcy, see n. 332) or if Art. 470 para. 2^{bis} CO only brought forward the point in time when the instruction becomes irrevocable as against the Member Bank as the instructed party but not LCH as payee, then the relevant

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point in time after which the instruction by the Member could no longer be terminated would be the credit of the payment on the CLS account as the account that LCH has indicated as the account to which the Relevant Clearing Member has to pay in order to discharge its payment obligation (see n. 326 *et seqq.*). Accordingly, if the bankruptcy of the Relevant Clearing Member were to occur after the instruction but prior to the credit to the CLS account, then LCH would have to return such payment.

(c) *Relevant Point in Time*

We think that in line with Art. 470 para. 3 CO in both instances described in sub-sections (a) and (b) above, such revocation would be considered to occur on the earlier of the publication of the bankruptcy or actual or deemed knowledge (see n. 319). It should be noted that FINMA would be (to the extent possible) legally obligated to inform certain financial infrastructures prior to the taking of insolvency measures against a regulated entity such as a bank or securities house, see n. 333.

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(d) *Further Payment Instruction from the Member Bank*

The payment instruction given by the Member Bank, in turn, would bear its own revocability. As long as the money has not been credited to the CLS account with SNB – as the account that LCH has designated to the Member as account to which the Member has to discharge its obligations, it is the Relevant Clearing Member as principal that continues to bear the risk of proper discharge. Once the money has been credited to the CLS account with SNB it becomes the risk of LCH to see to it that the money arrives in the final account of LCH. Where the Member Bank makes the payment through the Swiss Francs payment system SIC, it is in line with Art. 89 FMIA the finality rules of SIC that determine when the Member Bank's instruction becomes irrevocable (debit of the Member Bank's clearing account with SIC and simultaneous credit of the SNB clearing account (*Verrechnungszeitpunkt*)), or in the case of a direct instruction to SNB, it is the point in time when the Member Bank's account with SNB is debited.

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Alternatively the Relevant Clearing Member (if it is a bank itself) can make a direct wire transfer through SIC or by instructing SNB to debit the Relevant Clearing Member's account with SNB and credit the CLS account with SNB. In such instances the payment instructions of the Relevant Clearing Member would become final in accordance with the SIC finality rules (debit of the Member Bank's clearing account with SIC and simultaneous credit of the SNB clearing account (*Verrechnungszeitpunkt*)) and in addition be covered by the safeguards of Art. 89 FMIA or in the case of a direct instruction to SNB with the debit of the account of the Relevant Clearing Member with SNB.

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(e) *Excursus: In case of Additional Intermediaries in Payment Chain*

Where there is a chain of intermediaries or payment systems involved in a particular payment (and, hence, of instructions and payment mandates), there is some debate in doctrine whether there is a chain of instructions with the basic instruction of the principal

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and then further sub-instructions given by any instructed party, so that each instruction would need to be looked at separately for all purposes (that is the Federal Supreme Court's view) or, rather, if any further person is acting in substitution of the initial instructed bank, so that eventually the payee's bank (SNB) would act as a mere substitute of the principal's bank (Member Bank) when crediting the account of the payee, so that in fact the principal would be treated as if through the substitution chain it had given direct instructions to the payee's bank. If in accordance with the view expressed herein Art. 470 para. 2^{bis} CO applies also in a bankruptcy and also with respect to a payee then this is more of relevance, though, when it comes to questions in the context of erroneous instructions rather than the question of irrevocability of the principal's instruction as this is now set at the very beginning of the debit of the account of the principal and in our view needs to be looked at separately in each segment of the payment chain. This would then create situations where a payment instruction down the chain could be revoked independently of the revocation of the basic instruction of the Relevant Clearing Member. If based on such a revocation the money would not be credited to the account of CLS with SNB, the Relevant Clearing Member would not have duly discharged its obligations as this would only be the case once that the amount has been irrevocably credited to the account so designated by the creditor, which in the present context is the account designated by LCH, being the account of CLS with SNB. So as between the Relevant Clearing Member and LCH it is still the Relevant Clearing Member that bears such risk, in that it still owes that payment to LCH.

We note, however, that it is in our view unlikely that a Member Bank would instruct a further intermediary when making CHF payments instructed by a Member as virtually all Swiss banks have access to the RTGS system SIC. Only a few, smaller banks tend to rely on correspondence banks when making CHF payments.

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(f) *Summary and Implications for LCH and CLS*

In summary, the Member's instruction to its Member Bank to transfer funds to the accounts held by CLS with SNB pursuant to Art. 470 Abs. 2^{bis} CO becomes irrevocable at the point in time at which the Member Bank debits the Member's account held with it. In turn, the Member Bank's input into the Swiss RTGS system SIC becomes final in accordance with the SIC finality rules and is additionally covered by the safeguards of Art. 89 FMIA.

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Where an instruction has been given prior to the declaration of bankruptcy with respect to either the Member or the Member Bank, such bankruptcy will not cause the revocation of that instruction *provided that* the Member's account had been debited respectively, and with respect to the Member Bank, the Member Bank's input into the SIC system has become final prior to the declaration of bankruptcy of the instructing party. As FINMA is under a legal obligation to pre-inform certain financial infrastructures such as CCPs and payment systems about the upcoming bankruptcy of participating financial institutions, it is to be expected that the relevant financial infrastructures will be aware of the exact point in time the instructing party will be declared bankrupt.

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This would be different if one were contrary to our view to take the view that Art. 470 Abs. 2^{bis} CO either (i) does not cover the bankruptcy of the instructing party or (ii) does not offer any protection to the final payee (see n. 348). If (i) were the case, the instruction would only become final at such point in time when the funds are credited to the accounts of CLS held with SNB. If (ii) were the case, the instructed parties would be protected with respect to the bankruptcy of the Member as from the debit of the Member's account with the Member Bank or with the entry by the Member Bank of its instruction in the Swiss RTGS system SIC, but the payment would only become final when the funds are credited to the account of CLS held with SNB with respect to LCH. We note that there are no court precedents to date either supporting or rejecting the view expressed in this Opinion.

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9. Qualifications

The opinions expressed in this Opinion are subject to the following qualifications:

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- (i) The opinions expressed at paragraphs 3 - 8 are to be read in conjunction with and shall be deemed qualified by the discussion of the relevant opinion items therein and at paragraph 4. 358
- (ii) This Opinion is limited to Swiss law as in force and interpreted at the date hereof. 359
- (iii) The meaning and sense of certain concepts of Swiss law and expressions which are used herein and on which this Opinion is based do not necessarily equal the meaning and sense of concepts and expressions in the reader's jurisdiction. It is assumed by us that all words and expressions in the LCH Agreements are to be understood in accordance with their plain meaning and without regard of any import they may have under any other applicable laws and in particular English law. 360
- (iv) This Opinion is limited to matters of law and does neither address any factual circumstances or statements of the Parties to the LCH Agreements, whether contained in representations or warranties of the Parties thereunder or otherwise, nor any tax matters, including without limitation any tax, regulatory or accounting consequences of the entering into, execution and delivery of, and performance under the LCH Agreements. 361
- (v) We have not reviewed the terms of any Contract and consequently no opinion whatsoever is expressed in relation thereto. 362

- (vi) This Opinion assumes that no law other than Swiss law would affect or qualify the opinions expressed herein.

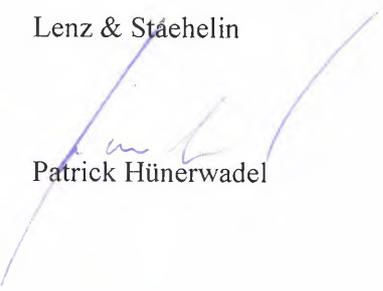
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This Opinion is governed by and construed in accordance with Swiss law and shall be subject to the exclusive jurisdiction of the ordinary courts of Zurich, Canton of Zurich, Switzerland.

This Opinion is given for the sole benefit of its addressee. This Opinion may not be disclosed to or relied upon by any other person without our consent in writing save that we consent to it being published on the addressee's website in connection with its compliance with obligations under prudential regulation on a strict non reliance basis, i.e. on the basis that we assume no responsibility to any person other than the addressee as a result.

Yours faithfully,

Lenz & Staehelin



Patrick Hünerwadel

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Annex 1
Clearing Membership Agreement

CLEARING MEMBERSHIP AGREEMENT

DATED

LCH.CLEARNET LIMITED

and
("the Firm")

Address of the Firm

THIS AGREEMENT is made on the date stated above

BETWEEN the Firm and LCH.CLEARNET LIMITED ("the Clearing House"), whose registered office is at Aldgate House, 33 Aldgate High Street, London, EC3N 1EA.

WHEREAS:

- A The Clearing House is experienced in carrying on the business of a clearing house and undertakes with each Clearing Member the performance of contracts registered in its name in accordance with the Rulebook;
- B The Clearing House has been appointed by certain Exchanges to provide central counterparty and other services in accordance with the terms and conditions of the Rulebook and certain agreements entered into between the Clearing House and such Exchanges;
- C The Clearing House also provides central counterparty and other services to participants in certain over-the-counter ("OTC") markets in accordance with the terms of this Agreement and the Rulebook;
- D The Firm desires to be admitted as a Clearing Member of the Clearing House to clear certain categories of Contract agreed by The Clearing House with the Firm and, the Clearing House having determined on the basis inter alia of the information supplied to it by the Firm that the Firm satisfies for the time being the relevant Criteria for Admission, the Clearing House agrees to admit the Firm as a Clearing Member subject to the terms and conditions of this Agreement.

NOW IT IS HEREBY AGREED as follows:-

1 Interpretation and Scope of Agreement

1.1. Unless otherwise expressly stated, in this Agreement:

- (a) "Cash Cover" means cover for margin (within the meaning of that term in the "Definitions" section of the Rulebook) provided in the form of a cash deposit with the Clearing House;
- (b) "Clearing Member" means a Person who has been admitted to membership of the Clearing House and whose membership has not terminated;
- (c) "Contract" means a contract or transaction eligible for registration in the Firm's name by the Clearing House in accordance with the Rulebook;
- (d) "Contribution" and "Contribution to the Default Fund" mean the sums of cash deposited by the Firm as cover in respect of the Firm's obligation to indemnify the Clearing House as provided by clause 9 of this Agreement and the Default Rules;
- (e) "Criteria for Admission" means criteria set out in one or more documents published from time to time by the Clearing House, being criteria to be satisfied by an applicant for admission as a Clearing Member in respect of the Designated Contracts which the applicant wishes to clear with the Clearing House;
- (f) "Default Fund" means the fund established under the Default Rules of the Clearing House to which the Clearing Member is required to contribute by virtue of clause 9 of this Agreement;
- (g) [DELETED]

- (h) "Default Notice" means a notice issued by the Clearing House in accordance with the Default Rules in respect of a Clearing Member who is or is likely to become unable to meet its obligations in respect of one or more Contracts;
 - (i) "Default Rules" means that part of the Rulebook having effect in accordance with Part IV of the Financial Services and Market Act 2000 (Recognition Requirements for Investment Exchange and Clearing Houses) Regulations 2001 to provide for action to be taken in respect of a Clearing Member subject to a Default Notice;
 - (j) "Designated Contract" has the meaning given to it in clause 2.1;
 - (k) "Exchange" means an organisation responsible for administering a market with which the Clearing House has an agreement for the provision of central counterparty and other services to Clearing Members;
 - (l) "Exchange Contract" means any contract which an Exchange has adopted and authorised Exchange Members to trade in under its Exchange Rules and in respect of which the Clearing House has agreed to provide central counterparty and other services;
 - (m) "Exchange Member" means any person (by whatever name called) being a member of, or participant in, a Market pursuant to Exchange Rules;
 - (n) "Exchange Rules" means any of the regulations, rules and administrative procedures or contractual arrangements for the time being and from time to time governing the operation of a Market administered by an Exchange and includes, without prejudice to the generality of the foregoing, any regulations made by the directors of an Exchange or by any committee established under the Rules, and, save where the context otherwise requires, includes Exchange Contracts, and the Rulebook;
 - (o) "Rulebook" means the Clearing House's General Regulations, Default Rules, Settlement Finality Regulations and Procedures and such other rules of the Clearing House as published and amended from time to time;
 - (p) "Market" means a futures, options, forward, stock or other market, administered by an Exchange, or an OTC market, in respect of which the Clearing House has agreed with such Exchange or, in respect of an OTC market, with one or more participants in that market, to provide central counterparty and related services on the terms of the Rulebook and in the case of an Exchange, pursuant to the terms of any agreement entered into with the Exchange;
 - (q) "Person" includes any firm, company, corporation, body, association or partnership (whether or not having separate legal personality) or any combination of the foregoing;
 - (r) "Procedures" means that part of the Rulebook by that name;
 - (s) "Registered Contract" means a contract registered in the Firm's name by the Clearing House in accordance with the Rulebook;
- 1.2. (a) References to "the parties" are references to the parties hereto, and "party" shall be construed accordingly;
- (b) References herein to a clause are to a clause hereof and clause headings are for ease of reference only;
- (c) Unless the context otherwise requires, words (including defined terms) denoting the singular shall include the plural and vice versa;

(d) References to writing include typing, printing, lithography, photography, facsimile transmission and other modes of representing or reproducing words in a visible form; and

(e) References herein to statutes, statutory instruments, the Rulebook, or provisions thereof are to those statutes, statutory instruments, Rulebook or provisions thereof as amended, modified or replaced from time to time.

1.3 This Agreement, the terms of any other agreement to which the Clearing House and the Clearing Member are party which relates to the provision of central counterparty and other services by the Clearing House, the terms of, and applicable to, each and every Registered Contract, the Rulebook and all amendments to any of the foregoing shall together constitute a single agreement between the Clearing House and the Clearing Member and both parties acknowledge that all Registered Contracts are entered into in reliance upon the fact that all such items constitute a single agreement between the parties.

1.4 A person who is not a party to this Agreement shall have no rights under or in respect of this Agreement.

2 Clearing Membership

2.1. The Firm is hereby admitted as a Clearing Member on the terms set out in this Agreement. The Firm shall be eligible to clear such categories of Contract (each a "Designated Contract") as the Clearing House shall from time to time notify to the Firm.

2.2. The Firm warrants that the information supplied by the Firm to the Clearing House in connection with the enquiry conducted by the Clearing House to determine whether the Firm satisfies for the time being the Criteria for Admission was and is at the date of this Agreement true and accurate in all material respects.

2.3. The Firm will ensure that it will at all times satisfy the Criteria for Admission. If at any time it has reason to believe that it no longer satisfies or may cease to satisfy any of such criteria the Firm shall immediately notify the Clearing House of the circumstances.

2.4. The Firm shall give written notice forthwith to the Clearing House of the occurrence of any of the following of which it is aware:-

(a) the presentation of a petition or passing of any resolution for the bankruptcy or winding-up of, or for an administration order in respect of, the Firm or of a subsidiary or holding company of the Firm;

(b) the appointment of a receiver, administrative receiver, administrator or trustee of the estate of the Firm;

(c) the making of a composition or arrangement with creditors of the Firm or any order or proposal in connection therewith;

(d) where the Firm is a partnership, an application to dissolve the partnership, the presentation of a petition to wind up the partnership, or any other event which has the effect of dissolving the partnership;

(e) where the Firm is a registered company, the dissolution of the Firm or the striking-off of the Firm's name from the register of companies;

(f) any step analogous to those mentioned in paragraphs (a) to (e) of this clause 2.4 is taken in respect of such persons as are referred to in those respective paragraphs in any jurisdiction;

(g) the granting, withdrawal or refusal of an application for, or the revocation of any licence or authorisation to carry on investment, banking or insurance business in any country;

- (h) the granting, withdrawal or refusal of an application for, or the revocation of, a license or authorisation by the Financial Conduct Authority, the Prudential Regulation Authority or membership of any self-regulating organisation, recognised or overseas investment exchange or clearing house (other than the Clearing House) under the Financial Services and Markets Act 2000 or any other body or authority which exercises a regulatory or supervisory function under the laws of the United Kingdom or any other state;
- (i) the appointment of inspectors by a statutory or other regulatory authority to investigate the affairs of the Firm (other than an inspection of a purely routine and regular nature);
- (j) the imposition of any disciplinary measures or sanctions (or similar measures) on the Firm in relation to its investment or other business by any Exchange, regulatory or supervisory authority;
- (k) the entering of any judgment against the Firm under Section 150 of the Financial Services and Markets Act 2000;
- (l) the conviction of the Firm for any offence under legislation relating to banking or other financial services, building societies, companies, credit unions, consumer credit, friendly societies, insolvency, insurance and industrial and provident societies or for any offence involving fraud or other dishonesty;
- (m) the conviction of the Firm, or any subsidiary or holding company of the Firm for any offence relating to money laundering, or the entering of judgment or the making of any order against the Firm in any civil action or matter relating to money laundering;
- (n) any enforcement proceedings taken or order made in connection with any judgement (other than an arbitration award or judgement in respect of the same) against the Firm; and
- (o) any arrangement entered into by the Firm with any other Clearing Member relating to the provision of central counterparty and associated services by the Clearing House of Contracts or transactions entered into by the Firm after the effective date of termination of this Agreement.

2.5. The Firm shall give written notice forthwith to the Clearing House of any person becoming or ceasing to be a director of or a partner in the Firm or of the occurrence of any of the following in relation to a director of or a partner in the Firm, if aware of the same:-

- (a) the occurrence of any event specified in clause 2.4 (insofar as it is capable of materially affecting him); or
- (b) any disqualification order under the Company Directors Disqualification Act 1986 or equivalent order in overseas jurisdictions.

2.6. The Firm shall give written notice forthwith to the Clearing House of any change in its name, the address of its principal place of business, registered office or UK office.

2.7. The Firm shall give written notice to the Clearing House forthwith upon its becoming aware that any person is to become or cease to be, or has become or ceased to be, a controller of the Firm, and shall in relation to any person becoming a controller of the Firm state:-

- (a) the controller's name, principal business and address;
- (b) the date of the change or proposed change.

In this clause and in clause 2.9 "controller" means a person entitled to exercise or control the exercise of 20 per cent or more of the voting power in the Firm.

- 2.8. The Firm shall give written notice forthwith to the Clearing House of any change in its business which affects the Firm's ability to perform its obligations under this Agreement.
- 2.9. Where the Clearing House receives notification pursuant to any of clauses 2.3 to 2.8, or the Clearing House reasonably suspects that the Firm may no longer satisfy some or all of the Criteria for Admission or the criteria for clearing a Designated Contract, the Clearing House shall be entitled in its absolute discretion to call for information of whatsoever nature in order to determine whether the Firm continues to satisfy the Criteria for Admission or the criteria for clearing a Designated Contract. Without prejudice to the foregoing, the Clearing House may at any time call for information relating to the affairs (including the ownership) of any controller of the Firm or any person who is to become a controller of the Firm. The Firm shall forthwith on demand supply to the Clearing House information called for under this clause and shall ensure that such information is true and accurate in all respects.
- 2.10. The Firm undertakes to abide by the Rulebook and undertakes at all times to comply with other provisions of Exchange Rules so far as they apply to the Firm.
- 2.11. The Firm undertakes that at all times, to the extent the Firm is required under any applicable law to be authorised, licensed or approved in relation to activities undertaken by it, it shall be so authorised, licensed or approved.
- 2.12. The Firm agrees that in respect of any Contract for which central counterparty services are to be provided to the Firm by the Clearing House in accordance with the Rulebook, including, but not limited to, any contract made by the Firm under Exchange Rules on the floor of a Market (or through a Market's automated trading system) or otherwise, whether with a member of that Market or with a client or with any other person, and including any Contract entered into in an OTC market, the Firm shall contract as principal and not as agent.
- 2.13. The Firm shall furnish financial information to the Clearing House in accordance with the requirements of the Rulebook or such other requirements as the Clearing House may from time to time prescribe.
- 2.14. The Firm undertakes that, in its terms of business with its clients (being clients in respect of whom the Firm is subject to any regulations made pursuant to rules and/or legislation applicable to the Firm with respect to the safeguarding or segregation of clients' money):
- (a) where it is subject to Exchange Rules, it will at all times include a stipulation that contracts made under Exchange Rules with or for them shall be subject to Exchange Rules (including the Rulebook); and
 - (b) that money of such clients in the possession of the Clearing House may be dealt with by the Clearing House in accordance with the Rulebook without exception.
- 2.15. Without prejudice to clause 2.14 the Firm undertakes that its dealings with all its clients or counterparties shall be arranged so as to comply with the requirement that the Firm deals with the Clearing House as principal, and that all sums deposited with the Clearing House by way of Cash Cover (including the Firm's Contribution to the Default Fund) shall be deposited unencumbered and by the Firm acting as sole principal and as legal and beneficial owner.
- 2.16. The Firm undertakes not to assign, charge or subject to any other form of security, whether purporting to rank in priority over, *pari passu* with or subsequent to the rights of the Clearing House, any Cash Cover provided to the Clearing House, including its entitlement to repayment of its Contribution to the Default Fund or any part of it. Any purported charge, assignment or encumbrance (whether by way of security or otherwise) of Cash Cover provided to the Clearing House shall be void. The Firm shall not otherwise encumber (or seek to encumber) any Cash Cover provided to the Clearing House.

3 Remuneration

- 3.1. The Clearing House shall be entitled to charge the Firm such fees, charges, levies and other dues, on such events, and calculated in accordance with such scales and methods, as are for the time prescribed by the Clearing House and, where relevant, for Exchange Contracts, after consultation with the relevant Exchange.

- 3.2. The Clearing House shall give the Firm not less than fourteen days' notice of any increase in such fees, charges, levies or other dues.

4 Facilities Provided by the Clearing House

4.1. Provision of Central Counterparty Services

- (a) Details of all Contracts to be registered by the Clearing House in the name of the Firm and in respect of which central counterparty services are to be provided shall be provided to the Clearing House in accordance with the Rulebook and any other agreement entered into between the Clearing House and the Firm.
- (b) Provided that a Contract meets the criteria for registration of that Contract in the name of the Firm and is a Designated Contract, and subject to the Rulebook, the Clearing House shall enter into a Registered Contract with the Firm in respect thereof. Each such Contract shall be registered in accordance with the Rulebook and the Clearing House shall perform its obligations in respect of all Registered Contracts in accordance with this Agreement and the Rulebook.

4.2. Maintenance of Records

The Clearing House agrees that for a period of ten years after termination of a Registered Contract it shall maintain records thereof. The Clearing House may make a reasonable charge to the Firm for the production of any such records more than three months after registration.

4.3. Information

The Clearing House will provide to the Firm such information at such times as is provided for by the Rulebook.

4.4. Accounts

The Clearing House agrees to establish and maintain one or more accounts for the Firm in accordance with the Rulebook. Accounts will be opened and kept by the Clearing House in such manner as will not prevent the Firm from complying with requirements of any regulations made pursuant to rules and/or legislation applicable to the Firm with respect to the safeguarding or segregation of clients' money and the rules of such regulatory organisation as the Firm may be subject to in respect of their cleared business.

5 Default

In the event of the Firm appearing to the Clearing House to be unable, or to be likely to become unable, to meet any obligation in respect of one or more Registered Contracts, or failing to observe any other financial or contractual obligation under the Rulebook, the Clearing House shall be entitled to take all or any of the steps set out in that regard in the Rulebook, including (but not limited to) the liquidation of all or any of the Registered Contracts.

6 Disclosure of Information

The Firm agrees that the Clearing House shall have authority to disclose any information of whatsoever nature concerning the Firm to such persons as is provided for by the Rulebook.

7 Partnership

If the Firm is a partnership, the liability of each partner in the Firm hereunder and under any Registered Contract shall be joint and several and, notwithstanding an event which would by operation of law give rise to the dissolution of the partnership, or entitle a partner to seek an order to dissolve the partnership, including, but not limited to, the event of the death, bankruptcy, winding-up or dissolution of any such partner, the respective obligations of the Clearing House and all other partners shall remain in full force and effect. If the Firm is a partnership, the Firm undertakes that if any new partner joins the Firm, the Firm shall procure that such new partner becomes jointly and severally liable alongside existing partners in respect of obligations of the Firm to the Clearing House outstanding at the date of such new partner's accession to the Firm.

8 Term

- 8.1. Subject to clause 8.3 either party (provided, in the case of the Firm, that the Clearing House has not issued a Default Notice in respect of the Firm) may terminate this Agreement by giving to the other party notice in writing, such notice to specify the effective date of termination ("the termination date") which shall be a business day not less than three months after the date of the notice, and this Agreement shall, subject to clause 8.2(b), terminate on the termination date. By the close of business on the termination date the Firm shall ensure that all Registered Contracts in the Firm's name have been closed-out or transferred so that there are no open Registered Contracts to which the firm is party at the end of the termination date.
- 8.2. If, under clause 8.1, the Firm has not closed out or transferred all Registered Contracts by the set termination date the Clearing House shall, at its sole discretion, be entitled to:
 - (a) liquidate any such Registered Contracts in accordance with the Rulebook; and
 - (b) require that the Firm remains a member of the Clearing House until such time as there are no Registered Contracts in existence to which the Firm is a party and the effective date of termination of this Agreement shall be postponed until such time.
- 8.3. If the Firm is in breach of or in default under any term of this Agreement or the Rulebook, or if the Clearing House has issued a Default Notice in respect of the Firm, or if the Clearing House reasonably determines that the Firm no longer satisfies the Criteria for Admission as a Clearing Member, the Clearing House may in its absolute discretion terminate this Agreement in writing either summarily or by notice as follows.

Any termination by notice under this clause 8.3 may take effect (subject as follows) on the expiry of 30 days or such longer period as may be specified in the notice. A notice given by the Clearing House under this clause may at the Clearing House's discretion allow the Firm a specified period in which to remedy the breach or default or to satisfy the Criteria for Admission as the case may be, and may specify what is to be done to that end, and may provide that if the same is done to the satisfaction of the Clearing House within that period the termination of this Agreement shall not take effect; and if this Agreement has terminated after the Clearing House has allowed the Firm such a period for remedy or satisfaction, the Clearing House shall then notify the Firm of the fact of termination. The Clearing House may, if the Clearing House has issued a Default Notice in respect of the Firm immediately, and in any other case after the effective date of termination, take such other action as it deems expedient in its absolute discretion to protect itself or any other Clearing Member including, without limitation, the liquidation of Registered Contracts but without prejudice to its own rights in respect of such contracts.

- 8.4. Upon the termination of this Agreement for whatever reason the Firm shall unless otherwise agreed cease to be a Clearing Member.

9 Default Fund

- 9.1. In this clause the term "Excess Loss" bears the meaning ascribed to it in the Rulebook.
- 9.2. The Firm, as primary obligor and not surety, hereby indemnifies the Clearing House in respect of any Excess Loss, and undertakes to deposit cash with the Clearing House as collateral for its obligations in respect of such indemnity, in accordance in each case with the Default Rules.

- 9.3. The Firm shall, in accordance with the Default Rules, continue to be liable to indemnify the Clearing House in respect of any Excess Loss arising upon any default occurring before the effective date of termination of this Agreement. Subject thereto, the indemnity hereby given shall cease to have effect on the effective date of termination of this Agreement, unless a Default Notice is issued by the Clearing House in respect of the Firm, in which case the indemnity hereby given shall cease to have effect after the date three months after the date of issue of such Default Notice.
- 9.4. Save as provided expressly by the Default Rules, the Firm shall not be entitled to exercise any right of subrogation in respect of any sum applied in satisfaction of its obligations to the Clearing House under this clause 9.

10 Force Majeure

Neither party shall be liable for any failure in performance of this Agreement if such failure arises out of causes beyond its control. Such causes may include, but are not limited to, acts of God or the public enemy, acts of civil or military authority, fire, flood, labour dispute (but excluding strikes, lock-outs and labour disputes involving the employees of the party intending to rely on this clause or its sub-contractors), unavailability or restriction of computer or data processing facilities or of energy supplies, communications systems failure, failure of a common depository, clearing system or settlement system, riot or war.

11 The Rulebook

In the event of conflict between the Rulebook and the provisions of this Agreement the Rulebook shall prevail.

12 Notices

- 12.1. Any notice or communication to be made under or in connection with this Agreement shall be made in writing addressed to the party to whom such notice or communication is to be given; save that a notice or communication of an urgent nature shall be given or made orally and as soon as reasonably practicable thereafter confirmed in writing in conformity hereto. A notice may be delivered personally or sent by post to the address of that party stated in this Agreement, or to such other address as may have been notified by that party in accordance herewith.
- 12.2. Where a notice is sent by the Clearing House by post it shall be deemed delivered 24 hours after being deposited in the post first-class postage prepaid in an envelope addressed to the party to whom it is to be given in conformity to clause 12.1, or in the case of international mail, on the fourth business day thereafter. In all other cases notices shall be deemed delivered when actually received.

13 Law

- 13.1. This Agreement shall be governed by and construed in accordance with the laws of England and Wales. The parties irrevocably agree that the courts of England and Wales shall have exclusive jurisdiction to hear and determine any action or dispute which may arise herefrom. The Clearing House and the Firm each irrevocably submits to such jurisdiction and to waive any objection which it might otherwise have to such courts being a convenient and appropriate forum.
- 13.2. The Firm irrevocably waives, with respect to itself and its revenues and assets all immunity on the grounds of sovereignty or other similar grounds from suit, jurisdiction of any court, relief by way of injunction, order for specific performance or for recovery of property, attachment of its assets (whether before or after judgement) and execution or enforcement of any judgement to which it or its revenues or assets might otherwise be entitled in any proceedings in the courts of any jurisdiction and irrevocably agrees that it will not claim any such immunity in any proceedings.

14 Service of Process

Without prejudice to any other mode of service, and subject to its right to change its agent for the purposes of this Clause on 30 days' written notice to the Clearing House, the Firm (other than where it is incorporated in England and Wales or otherwise has an office in England and Wales) appoints, as its agent for service of process relating to any proceedings

before the courts of England and Wales in connection with the Firm the person in London as notified to the Clearing House in writing with the application for admission.

IN WITNESS whereof the parties hereto have caused this Agreement to be signed by their duly authorised representatives the day and year first before written.

(Signature)

(Print Name and Title)

for THE FIRM

(Signature)

(Print Name and Title)

for THE FIRM

(Signature)

(Print Name and Title)

for **LCH.CLEARNET LIMITED**

(Signature)

(Print Name and Title)

for **LCH.CLEARNET LIMITED**

LCH.CLEARNET LIMITED

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Annex 2
Deed of Charge

A company whether incorporated in England and Wales or an overseas company.

CHARGE BY CLEARING MEMBER

CHARGE SECURING OWN OBLIGATIONS

Date of Execution:

Date of Delivery:
(to be completed by LCH.Clearnet Limited)

Name and Address of Chargor:

Clearing Membership Agreement Date:

Chargor's Account:

THIS DEED made on the date above-stated **BETWEEN THE ABOVE-NAMED CHARGOR** ("the Chargor") and **LCH.CLEARNET LIMITED** ("the Clearing House")

WITNESSES as follows :

1. **Interpretation**

- (1) Any reference herein to:
 - (a) any statute or to any provisions of any statute shall be construed as a reference to any statutory modification or re-enactment thereof and to any regulations or orders made thereunder and from time to time in force; and
 - (b) an agreement or instrument shall be to that agreement or instrument as amended from time to time.
- (2) A reference herein to collateral or cash being "provided" includes the act of (i) transferring, (ii) delivering, or (iii) crediting to an account or effecting, directly or indirectly, any of the foregoing.
- (3) The Clause headings shall not affect the construction hereof.

1A. **The Secured Obligations**

- (1) The Chargor shall pay to the Clearing House all monies (including settlement costs, interest and other charges) which now are or at any time hereafter may be or become due or owing by the Chargor to the Clearing House on the account identified above (or, but only if no account is identified, on all accounts of the Chargor with the Clearing House) and discharge all other liabilities of the Chargor (whether actual or contingent, now existing or hereafter incurred) to the Clearing House on the said account (or, if no account is identified, on all accounts of the Chargor with the Clearing House) in each case when due in accordance with the Clearing Membership Agreement and the Clearing House's Rulebook referred to therein (the Clearing Membership Agreement and the Clearing House's Rulebook as from time to time amended, renewed or supplemented being hereinafter referred to as "**the Agreement**") or, if the Agreement does not specify a time for such payment or discharge, promptly following demand by the Clearing House.
- (2) In the event that the Chargor fails to comply with sub-paragraph (1) above, the Chargor shall pay interest accruing from the date of demand on the monies so demanded and on the amount of all other liabilities at the rate provided for in the Agreement or, in the event of no such rate having been agreed, at a rate determined by the Clearing House (the rate so agreed or determined to apply

after as well as before any judgment), such interest to be paid upon demand of the Clearing House in accordance with its usual practices and to be compounded with principal and accrued interest in the event of its not being duly and punctually paid.

- (3) The monies, other liabilities, interest and other charges referred to in sub-paragraph (1) of this Clause, the interest referred to in sub-paragraph (2) of this Clause and all other monies and liabilities payable or to be discharged by the Chargor under or pursuant to any other provision of this Deed are hereinafter collectively referred to as "**the Secured Obligations**".

1B. **Holding of Collateral**

- (1) The Chargor shall, in accordance with the Procedures, transfer collateral to the Clearing House. Where such collateral takes the form of Securities, the Clearing House shall hold such Securities for the Chargor, subject to the terms of (and including the security constituted by) this Deed.
- (2) From time to time, in accordance with the Procedures and in the context of a transfer of one or more contracts and related cover from one member of the Clearing House to the Chargor at the request of a client of that other member or the Chargor, the Clearing House shall designate that certain Securities which it previously held for a third party are instead held by the Clearing House for the Chargor and form part of the collateral provided by the Chargor in satisfaction of its requirements under the Procedures. Upon such designation, the Clearing House shall hold such Securities for the Chargor, subject to the terms of this Deed.
- (3) The Clearing House will identify in its own books that any Securities referred to in sub-paragraphs (1) or (2) above are held by it for the account of and (as between the Chargor and the Clearing House) belong to the Chargor (subject to the terms of this Deed) and shall be recorded in the Securities Account (as defined below) which shall be subject to the security constituted by this Deed. Where the Clearing House holds any such Securities in an account (including an omnibus account) at any Clearance System or with any Custodian Bank with any other Securities, the Clearing House will take all actions within its control to ensure that such Securities are recorded in accounts with the Clearance System or Custodian Bank (as applicable) in which the Clearing House's own assets are not recorded.
- (4) All Distributions in the form of cash received by the Clearing House on any Securities which are held by the Clearing House for the account of the Chargor in accordance with sub-paragraphs (1) or (2) above and any cash provided to the Clearing House in connection with transactions relating to Securities recorded in the Securities Account (excluding, for the avoidance of doubt, any cash provided directly by the Chargor to the Clearing House as collateral on a

title transfer basis) shall be received by the Clearing House for its own account and paid into one or more accounts in the Clearing House's name, with a corresponding and equal credit arising on and being recorded in the Cash Account (as defined below) whereupon such Distributions and other cash so provided to the Clearing House as recorded in the Cash Account shall be held by the Clearing House for the account of the Chargor and shall be subject to the security constituted by this Deed and designated as such in the Clearing House's books and records.

- (5) The Clearing House may hold any Securities pursuant to this Clause 1B (*Holding of Collateral*) in one or more omnibus accounts with a Custodian Bank or Clearance System, as the case may be, together with other Securities which it holds for other third parties which have granted a charge over such assets in favour of the Clearing House in a form substantially the same as this Deed but no other Securities. The Clearing House shall ensure that any such omnibus account with a Clearance System or Custodian Bank is clearly identified as an account relating to Securities held by the Clearing House on behalf of third parties.
- (6) The Clearing House undertakes to the Chargor that it will at all times ensure that, pursuant to the terms governing any account with any Clearance System or Custodian Bank in which any Securities are held for the Chargor, any claim or security interest which that Clearance System or Custodian Bank may have against or over such Securities shall be limited to any unpaid fees owed by the Clearing House to such Clearance System or Custodian Bank in respect of such account.

2. **Charge**

- (1) The Chargor acting in due capacity (as defined in sub-paragraph (3) below) (and to the intent that the security so constituted shall be a security in favour of the Clearing House extending to all beneficial interests in the assets hereby charged and to any proceeds of sale or other realisation thereof or of any part thereof including any redemption monies paid or payable in respect thereof) hereby separately assigns, charges and pledges by way of first fixed security and by way of continuing security to the Clearing House, until discharged by the Clearing House in accordance with this Deed, for the payment to the Clearing House and the discharge of all the Secured Obligations, the Charged Property.
- (2) It shall be implied in respect of sub-paragraph (1) above that the Chargor is charging the Charged Property free from all charges and encumbrances (whether monetary or not) and from all other rights exercisable by third parties (including liabilities imposed and rights conferred by or under any enactment) except for any charge or lien routinely arising in favour of a Custodian Bank or Clearance System and applying to assets held by the Clearing House with that Custodian Bank or Clearance System and any third party's beneficial interest in

the Charged Property which ranks behind the rights of the Clearing House in respect of the Charged Property.

(3) In this Deed:

"acting in due capacity" in relation to the Chargor means that each of the dispositions of property hereby effected by the Chargor is made with full title guarantee in accordance with the Law of Property (Miscellaneous Provisions) Act 1994 except as expressly permitted or contemplated under this Deed;

"Cash Account" means any account maintained by the Clearing House on its books for the account of the Chargor in which an amount equal to any cash Distributions or cash provided to the Clearing House in connection with transactions relating to Securities recorded in the Securities Account (excluding, for the avoidance of doubt, any cash provided directly by the Chargor to the Clearing House as collateral on a title transfer basis) are recorded;

"Charged Property" means at any time all present and future rights, title and interest of the Chargor in and to:

- (i) all Securities from time to time recorded in and represented by the Securities Account and held by the Clearing House for the account of the Chargor in accordance with Clause 1B;
- (ii) all Distributions including without limitation Distributions in the form of cash;
- (iii) all cash provided to the Clearing House in connection with transactions relating to Securities recorded in the Securities Account (excluding, for the avoidance of doubt, any cash provided directly by the Chargor to the Clearing House as collateral on a title transfer basis);
- (iv) the Securities Account; and
- (v) the Cash Account;

"Chargor Custodian Bank" means a bank or custodian or any nominee company or trust company which is a subsidiary of such a bank or custodian with which the Chargor maintains any cash account or securities account;

"Clearance System" shall be construed as a reference to any system from time to time used or constituted for the clearing, collective safe custody or central deposit of securities, and any depository for any of the foregoing;

"Clearing Membership Agreement" means in relation to the Chargor the Clearing Membership Agreement between the Chargor and the Clearing House

having the date specified on the first page of this Deed, as such agreement may be amended and or replaced from time to time;

"Custodian Bank" means a bank or custodian or any nominee company or trust company which is a subsidiary of such a bank or custodian with which the Clearing House maintains any cash account or securities account;

"Default Notice" has the meaning given to it in the Default Rules;

"Default Rules" has the meaning given to such term in the Clearing Membership Agreement;

"Deed" means this charge made between the Chargor and the Clearing House on the date above-stated, as the same may be amended, supplemented or restated from time to time;

"Distributions" means all rights, benefits and proceeds including, without limitation:

- (a) any dividends or interest, annual payments or other distributions; and
- (b) any proceeds of redemption, substitution, exchange, bonus or preference, under option rights or otherwise,

in each case attaching to or arising from or in respect of any Securities forming part of the Charged Property;

"Procedures" means the one or more documents containing the working practices and administrative requirements of the Clearing House for the purposes of implementing the Clearing House's Rulebook and Default Rules from time to time in force, or procedures for application for and regulation of clearing membership of the Clearing House;

"Receiver" means a receiver, receiver and manager or an administrative receiver as the Clearing House may specify at any time in the relevant appointment made under this Deed, which term will include any appointee made under a joint and/or several appointment by the Clearing House;

"Securities" shall be construed as a reference to bonds, debentures, notes, stock, shares, bills, certificates of deposit and other securities and instruments, including Distributions in the form of Securities (and without limitation, shall include any of the foregoing not constituted, evidenced or represented by a certificate or other document but by any entry in the books or other records of the issuer, a trustee or other fiduciary thereof, or a Clearance System); and

"Securities Account" means any account maintained by the Clearing House

on its books for the account of the Chargor in which Securities are recorded.

3. **Release**

- (1) Upon the Clearing House being satisfied that the Secured Obligations have been irrevocably paid or discharged in full, the Clearing House shall, at the request and cost of the Chargor, release or discharge (as appropriate) all the Charged Property from the security created by this Deed provided that, without prejudice to any remedy which the Chargor may have if the Clearing House fails to comply with its obligations under this Clause, such actions shall be without recourse to, and without any representations or warranties by, the Clearing House or any of its nominees
- (2) The Chargor may, in the circumstances specified in sections 1.1.2 and 1.1.3 of the Procedures Section 4 (*Margin and Collateral*), request that part or all of the Charged Property, or the proceeds thereof, be returned or repaid to, or to the order of, the Chargor. Where, pursuant to such a request, the Clearing House returns or repays any of the Charged Property, or the proceeds thereof, pursuant to sections 1.1.2 or 1.1.3 of the Procedures Section 4 (*Margin and Collateral*), such Charged Property shall be released or discharged (as appropriate) from the security interest created over such Charged Property and the proceeds thereof pursuant to Clause 2(1) with effect from the time such Charged Property, or the proceeds thereof, are transferred by the Clearing House to, or to the order of, the Chargor in accordance with the Procedures.

4. **Income**

Prior to a Default (as defined in Clause 11(1) below), the Clearing House consents to the payment or transfer of any and all Distributions received by the Clearing House in respect of any Charged Property to the Chargor (and upon such payment or transfer, the Distributions shall be released from the security constituted by this Deed) provided that, in the Clearing House's reasonable view, the Clearing House would still have sufficient security, following such payment or transfer, to secure the Secured Obligations.

5. **Voting rights, calls and other obligations in respect of the Securities**

- (1) The Chargor must pay all calls and other payments due and payable in respect of any Securities and must comply with all requests (including requests for information by any listing or other authority), obligations and conditions relating to the Securities. In any case of default by the Chargor in this respect the Clearing House may if it thinks fit make any such payments on behalf of the Chargor (but shall be under no obligation to do so) in which event any sums so paid shall be reimbursed by the Chargor on demand by the Clearing House and until reimbursed shall bear interest in accordance with Clause 1A(2) above.

- (2) The Chargor shall not exercise or be entitled to exercise any voting rights, powers and other rights in respect of the Securities which are held by the Clearing House for the account of the Chargor pursuant to this Deed.

6. **Reinstatement**

If any discharge, release or arrangement is made by the Clearing House in whole or in part on the basis of any payment, security or other disposition which is avoided or must be restored in insolvency, liquidation, administration or otherwise, without limitation, then the liability of the Chargor and the security created by this Deed will continue or be reinstated as if the discharge, release or arrangement had not occurred.

7. **Warranties and Undertakings**

The Chargor hereby represents and warrants to the Clearing House and undertakes on an ongoing basis that:

- (i) the Chargor is duly incorporated or organised and validly existing under the laws of its jurisdiction of organisation or incorporation;
- (ii) the Chargor and each of its subsidiaries has the power to own its assets and carry on its business as it is being conducted;
- (iii) subject to any legal or equitable interest which any common depository, Clearance System or Custodian Bank may have in any Securities and to any third party's beneficial interest in the Charged Property which ranks behind the rights of the Clearing House in respect of the Charged Property, the Chargor is and will at all times during the subsistence of the security and security interest hereby constituted, be the sole and lawful owner of, and be entitled to the entire beneficial interest in, the Charged Property free from mortgages or charges (other than as a result of the security created under this Deed, any charge or lien arising in favour of any Clearance System or Custodian Bank and any charge in favour of the Chargor) or other encumbrances and no other person (save as aforesaid) has any rights or interests therein;
- (iv) save as contemplated by Clause 3(2), the Chargor has not sold or agreed to sell or otherwise disposed of or agreed to dispose of, and will not at any time during the subsistence of the security hereby constituted sell or agree to sell or otherwise dispose of or agree to dispose of, the benefit of all or any rights, titles and interest in and to the Charged Property or any part thereof;
- (v) the Chargor has and will at all material times have the necessary power to enable the Chargor to enter into and perform the obligations expressed to be assumed by the Chargor under this Deed;

- (vi) this Deed constitutes legal, valid, binding and enforceable obligations of the Chargor and is a security over, and confers a first security interest in, the Charged Property and every part thereof, effective in accordance with its terms (subject to applicable bankruptcy, resolution, reorganisation, insolvency, moratorium or similar laws affecting creditors' rights generally and subject, as to enforceability, to equitable principles of general application (regardless of whether enforcement is sought in a proceeding in equity or at law));
- (vii) all necessary authorisations and filings to enable or entitle the Chargor to enter into this Deed have been obtained and are in full force and effect and will remain in such force and effect at all times during the subsistence of the security hereby constituted;
- (viii) the execution of this Deed does not violate any agreement to which the Chargor is a party or breach any obligation to which the Chargor is subject and does not conflict with any law or regulation applicable to it (if such conflict would adversely affect the Clearing House's rights under this Deed) or its constitutional documents;
- (ix) it has been and shall at all times remain expressly agreed between the Chargor and each of the Chargor's clients or other persons who are for the time being (or would be, but for the provisions of this Deed) entitled to the entire beneficial interest in all or any parts of the Charged Property that, in relation to any assets from time to time held by the Chargor or delivered to the Chargor for the account of any such client or other person which at any time form part of the Charged Property, the Chargor may, free of any interest of any such client or other person therein which is adverse to the Clearing House, charge or otherwise constitute security over such assets in favour of the Clearing House on such terms as the Clearing House may from time to time prescribe and, in particular but without limitation, on terms that the Clearing House may enforce and retain such charge or other security in satisfaction of or pending discharge of all or any obligations of the Chargor to the Clearing House;
- (x) in no case is the Chargor or the Chargor's client or other person who is for the time being the lawful owner of or person entitled to the entire beneficial interest in any part of the Charged Property, nor will the Chargor, client or other such person be, in breach of any trust or other fiduciary duty in placing or authorising the placing of any Charged Property (or rights, benefits or proceeds forming part of the Charged Property) under this Deed;
- (xi) no corporate actions, legal proceedings or other procedure or steps have been taken in relation to, or notice given in respect of, a composition, compromise, assignment or arrangement with any creditor of the Chargor or in relation to the suspension of payments or moratorium of any indebtedness, winding-up, dissolution, administration or reorganisation (by way of voluntary arrangement, scheme of arrangement or otherwise) of, or the appointment of an administrator

to, the Chargor (other than any which will be dismissed, discharged, stayed or restrained within 15 days of their instigation) and no such step is intended by the Chargor (save for the purposes of any solvent re-organisation or reconstruction which has previously been approved by the Clearing House);

- (xii) the Chargor undertakes to abide by the Procedures as in effect from time to time.

8. **Negative Pledge**

- (1) The Chargor hereby undertakes with the Clearing House that at no time during the subsistence of the security hereby constituted will the Chargor, otherwise than:

- (i) in favour of the Clearing House; or
- (iii) with the prior written consent of the Clearing House and in accordance with and subject to any conditions which the Clearing House may attach to such consent,

create, grant, extend or, except in relation to any charge or lien in favour of any Clearance System or Custodian Bank, permit to subsist any mortgage or other fixed security or any floating charge or other security interest on, over or in the Charged Property or any part thereof. The foregoing prohibition shall apply not only to mortgages, other fixed securities, floating charges and security interests which rank or purport to rank in point of security in priority to the security hereby constituted but also to any mortgages, securities, floating charges or security interests which rank or purport to rank *pari passu* therewith or thereafter.

- (2) Sub-paragraph (1) above does not, during the subsistence of the security hereby constituted, operate to prevent the Chargor from continuing to hold a security interest in the Charged Property previously created in favour of the Chargor, *provided always* that the interest in favour of the Chargor shall rank after the security created by this Deed.

9. **Preservation of Charged Property**

- (1) Until the security hereby constituted shall have been discharged, the Chargor shall ensure, unless required by law or regulation to restrict any transfer (in which case the Chargor shall immediately notify the Clearing House of such restrictions), that all of the Charged Property is and at all times remains free from any restriction on transfer.
- (2) The Chargor shall not, to the extent that the same is within the control of the Chargor, permit or agree to any variation of the rights attaching to or conferred by the Charged Property or any part thereof without the prior consent of the

Clearing House in writing.

- (3) The Clearing House shall not have any right of use or re-hypothecation right, in respect of the Charged Property, whether under Regulation 16 of the Financial Collateral Arrangements (No.2) Regulations 2003, the New York Uniform Commercial Code or any applicable Federal law of the United States or otherwise, *provided that* this provision shall not affect the powers of the Clearing House under Clauses 12 (*Power of Sale*) and 13 (*Right of Appropriation*) or any other rights to enforce the security interest herein created against the Charged Property.

10. **Further Assurance**

- (1) In the case of any part of the Charged Property situated in the United States of America, it is acknowledged and agreed by the Chargor that this Deed shall also constitute a security agreement for the purpose of creating a security interest in the Charged Property under applicable provisions of the Uniform Commercial Code or other applicable laws or regulations of the State of New York. For purposes hereof, "**Charged Property situated in the United States of America**" means: (i) in the case of any securities account and/or securities entitlements or other rights or assets or investment property credited to a securities account as financial assets, a securities account maintained with a securities intermediary whose jurisdiction is New York or any other State of the United States for purposes of the NY UCC; (ii) in the case of any deposit account and/or any amounts credited to a deposit account, a deposit account maintained with a bank whose jurisdiction is New York or any other State of the United States for purposes of the NY UCC; and (iii) in the case of any commodity account or any commodity contract credited to a commodity account such commodity account is maintained with a commodity intermediary whose jurisdiction is New York or any other State of the United States for purposes of the NY UCC . In furtherance of the foregoing and without limiting the generality of Clause 2 (*Charge*) above, in order to secure the payment, performance and observance of the Secured Obligations, the Chargor hereby grants to the Clearing House a continuing security interest in, right of set-off against, and an assignment to the Clearing House of all of the Charged Property situated in the United States of America and all rights thereto, in each case whether now owned or existing or hereafter acquired or arising and which shall include, without limitation, all of the Chargor's interests in any deposit accounts, investment property and securities entitlements (as such terms are defined in the Uniform Commercial Code of the State of New York; the "**NY UCC**"), together with all proceeds (as defined in the NY UCC) and products of all or any of the property described above.
- (2) The Chargor undertakes promptly to execute and do (at the cost and expense of the Chargor) all such deeds, documents, acts and things as may be necessary or desirable in order for the Clearing House to enjoy a fully perfected

security interest in the whole of the Charged Property, including without limitation the deposit of the Charged Property with a Clearance System or Custodian Bank (as applicable) and the perfection of pledges or transfers under such laws, of whatever nation or territory, as may govern the pledging or transfer of the Charged Property or part thereof or other mode of perfection of this Deed and the security interest expressed to be created hereby. Without limiting the foregoing, the Chargor agrees with and covenants to the Clearing House that with respect to all Charged Property situated in the United States of America consisting of investment property, money, instruments, securities, securities entitlements, other financial assets and commodity contracts (as defined in the NY UCC), such Charged Property shall be held, maintained or deposited, as applicable, in a securities account or commodity account (in the case of commodity contracts) (such that, in each case, the Clearing House shall become the entitlement holder thereof, as defined in the NY UCC) or a deposit account (as defined in the NY UCC), in the case of Charged Property that may be credited to a Deposit Account, in the name of the Clearing House, or, if permitted by the Procedures, may be maintained and held in the Chargor's name at a Chargor Custodian Bank (whose jurisdiction is New York or any other State of the United States for purposes of the NY UCC) which shall have executed and delivered to the Clearing House an agreement whereby such Chargor Custodian Bank agrees that it will comply with entitlement orders of the Clearing House without further consent by the Chargor. Notwithstanding anything to the contrary herein, in respect of any Charged Property situated in the United States of America, the Clearing House shall comply with all non-waivable requirements of the NY UCC with respect to how the secured party must deal with collateral under its control or in its possession.

11. **Enforcement of Security**

(1) On and at any time:

- (i) if a Default Notice is served on the Chargor in accordance with Rule 3 of the Default Rules; or
- (ii) if the Chargor requests the Clearing House to exercise any of its powers under this Deed,

(each such event a "**Default**"), the security created by or pursuant to this Deed is immediately enforceable and the Clearing House may, without notice to the Chargor or prior authorisation from any court, in its absolute discretion:

- (a) enforce all or any part of the security created by this Deed (at the times, in the manner and on the terms it thinks fit) and take possession of (provided that the Clearing House will not be liable, by reason of entering into possession of any Charged Property, to account as mortgagee in possession or for any loss on realisation or for any default

or omission for which a mortgagee in possession may be liable unless such loss, default or omission is caused by the Clearing House's gross negligence or wilful misconduct) and hold, sell, or otherwise dispose of all or any part of the Charged Property (at the time, in the manner and on the terms it thinks fit); and

- (b) whether or not it has appointed a Receiver, exercise all or any of the powers, authorisations and discretions conferred by the Law of Property Act 1925 (as varied or extended by this Deed) on chargees and by this Deed on any Receiver or otherwise conferred by law on chargees or Receivers.
- (2) The power of sale and other powers conferred by section 101 of the Law of Property Act 1925 on mortgagees, as varied and extended by this Deed, shall arise (and the Secured Obligations shall be deemed due and payable for that purpose) on the date of this Deed and shall be exercisable in accordance with Clause 11(1).

12. **Power of Sale**

- (1) If a Default has occurred, the Clearing House shall have and be entitled without prior notice to the Chargor to exercise the power to sell or otherwise dispose of, for any consideration (whether payable immediately or by instalments) as the Clearing House shall think fit, the whole or any part of the Charged Property and may (without prejudice to any right which it may have under any other provision hereof) treat such part of the Charged Property as consists of money as if it were the proceeds of such a sale or other disposal. The Clearing House shall be entitled to apply the proceeds of such sale or other disposal in paying the costs of such sale or other disposal and (subject to the rights or claims of any person entitled in priority to the Clearing House) in or towards the discharge of the Secured Obligations, the balance (if any) to be paid to the Chargor or other persons entitled thereto. Such power of sale or other disposal shall operate as a variation and extension of the statutory power of sale under section 101 of the Law of Property Act 1925.
- (2) The restriction contained in section 103 of the Law of Property Act 1925 on the exercise of the statutory power of sale shall not apply to any exercise by the Clearing House of its power of sale or other disposal. In favour of a purchaser a certificate in writing by an officer or agent of the Clearing House that either or both of such powers has arisen and is exercisable shall be conclusive evidence of that fact.
- (3) Upon any such default or failure as aforesaid the Clearing House shall also have with respect to any part of the Charged Property situated in the United States of America all of the rights and remedies of a secured party under the NY UCC or any other applicable law of the State of New York and all rights provided herein or in any other applicable security, loan or other agreement, all of which

rights and remedies shall to the full extent permitted by law be cumulative.

13. **Right of Appropriation**

- (1) To the extent that any of the Charged Property constitutes "financial collateral" and this Deed and the obligations of the Chargor hereunder constitute a "security financial collateral arrangement" (in each case as defined in, and for the purposes of, the Financial Collateral Arrangements (No. 2) Regulations 2003 (SI 2003 No. 3226), as amended, (the "**Regulations**") the Clearing House shall have the right (at any time following the occurrence of a Default) to appropriate all or any part of such financial collateral in or towards discharge of the Secured Obligations and may exercise such right to appropriate upon giving written notice to the Chargor. For this purpose, the parties agree that the value of such financial collateral so appropriated shall be determined as follows:
- (a) if the financial collateral is listed or traded on a recognised exchange or by reference to a public index, its value will be taken as the value at which it could have been sold on the exchange or which is given in the public index on the date of appropriation; and
 - (b) in any other case, the value of the financial collateral will be such amount as the Clearing House reasonably determines having taken into account advice obtained by it from an independent investment or accountancy firm of national standing selected by it.
- (2) The parties agree that the method of valuation provided for in this Deed shall constitute a commercially reasonable method of valuation for the purposes of the Regulations.

14. **Immediate Recourse**

The Chargor waives any right it may have of first requiring the Clearing House to proceed against or enforce any other rights or security or claim payment from any person before claiming from the Chargor under this Deed. This waiver applies irrespective of any law or any provision of this Deed to the contrary.

15. **Consolidation of Securities**

Subsection (1) of section 93 of the Law of Property Act 1925 shall not apply to this Deed.

16. **Effectiveness of Security**

- (1) This Deed shall be in addition to and shall be independent of every other security which the Clearing House may at any time hold for any of the Secured Obligations. No prior security held by the Clearing House over the whole or any part of the Charged Property shall merge into the security hereby constituted.

- (2) This Deed shall remain in full force and effect as a continuing security unless and until the Clearing House discharges it.
- (3) Nothing contained in this Deed is intended to, or shall operate so as to, prejudice or affect any bill, note, guarantee, mortgage, pledge, charge or other security of any kind whatsoever which the Clearing House may have for the Secured Obligations of any of them or any right, remedy or privilege of the Clearing House thereunder.

17. **Avoidance of Payments**

If the Clearing House considers that any payment or discharge of the Secured Obligations is capable of being avoided or reduced by virtue of any bankruptcy, insolvency, liquidation or similar laws then such payment or discharge shall not be considered to have been made for the purposes of determining whether the Secured Obligations have been irrevocably paid or discharged in full.

18. **Power of Attorney**

The Chargor hereby irrevocably appoints the Clearing House to be the Chargor's attorney and in the Chargor's name and on the Chargor's behalf and as the act and deed of the Chargor to sign, seal, execute, deliver, perfect and do all deeds, instruments, mortgages, acts and things as may be, or as the Clearing House may consider to be, requisite for carrying out any obligation imposed on the Chargor under Clause 10 (*Further Assurance*) above, or for enabling the Clearing House to exercise its power of sale or other disposal referred to in Clause 12 (*Power of Sale*) above or for carrying out any such sale or other disposal made under such power into effect, or exercising any of the rights and powers referred to in Clause 9 (*Preservation of Charged Property*) above, including without limitation the appointment of any person as a proxy of the Chargor. The Chargor hereby undertakes to ratify and confirm all things done and documents executed by the Clearing House in the exercise of the power of attorney conferred by this Clause.

19. **Receivers and Administrators**

- (1) At any time after having been requested to do so by the Chargor or after this Deed becomes enforceable in accordance with Clause 11 (*Enforcement of Security*) above the Clearing House may by deed or otherwise (acting through an authorised officer of the Clearing House), without prior notice to the Chargor:
 - (a) appoint one or more persons to be a Receiver of the whole or any part of the Charged Property;
 - (b) appoint one or more Receivers of separate parts of the Charged Property respectively;

- (c) remove (so far as it is lawfully able) any Receiver so appointed; and
 - (d) appoint another person(s) as an additional or replacement Receiver(s).
- (2) Each person appointed to be a Receiver pursuant to sub-paragraph (1) above will be:
- (a) entitled to act individually or together with any other person appointed or substituted as Receiver;
 - (b) for all purposes deemed to be the agent of the Chargor which shall be solely responsible for his acts, defaults and liabilities and for the payment of his remuneration and no Receiver shall at any time act as agent for the Clearing House; and
 - (c) entitled to remuneration for his services at a rate to be fixed by the Clearing House from time to time (without being limited to the maximum rate specified by law including the Law of Property Act 1925).
- (3) The powers of appointment of a Receiver shall be in addition to all statutory and other powers of appointment of the Clearing House under the Law of Property Act 1925 (as extended by this Deed) or otherwise and such powers shall remain exercisable from time to time by the Clearing House in respect of any part of the Charged Property.
- (4) Every Receiver shall (subject to any restrictions in the instrument appointing him but notwithstanding any winding-up or dissolution of the Chargor) have and be entitled to exercise, in relation to the Charged Property in respect of which he was appointed, and as varied and extended by the provisions of this Deed (in the name of or on behalf of the Chargor or in his own name and, in each case, at the cost of the Chargor):
- (a) all the powers conferred by the Law of Property Act 1925 on mortgagors and on mortgagees in possession and on receivers appointed under that Act;
 - (b) all the powers of an administrative receiver set out in Schedule 1 to the Insolvency Act 1986 (whether or not the Receiver is an administrative receiver);
 - (c) all the powers and rights of an absolute owner and power to do or omit to do anything which the Chargor itself could do or omit to do;
 - (d) the power to delegate (either generally or specifically) the powers, authorities and discretions conferred on it by this Deed (including the

power of attorney) on such terms and conditions as it shall see fit. Such delegation shall not preclude either the subsequent exercise or any subsequent delegation or any revocation of such power, authority or discretion by the Receiver itself; and

- (e) the power to do all things (including bringing or defending proceedings in the name or on behalf of the Chargor) which seem to the Receiver to be incidental or conducive to:
 - (i) any of the functions, powers, authorities or discretions conferred on or vested in him;
 - (ii) the exercise of any rights, powers and remedies of the Clearing House provided by or pursuant to this Deed or by law (including realisation of all or any part of the Charged Property); or
 - (iii) bringing to his hands any assets of the Chargor forming part of, or which when got in would be, Charged Property.

- (5) The receipt of the Clearing House or any Receiver shall be a conclusive discharge to a purchaser and, in making any sale or disposal of any of the Charged Property or making any acquisition, the Clearing House or any Receiver may do so for such consideration, in such manner and on such terms as it thinks fit.
- (6) No purchaser or other person dealing with the Clearing House or any Receiver shall be bound to inquire whether the right of the Clearing House or such Receiver to exercise any of its powers has arisen or become exercisable or be concerned with any propriety or regularity on the part of the Clearing House or such Receiver in such dealings.
- (7) Any liberty or power which may be exercised or any determination which may be made under this Deed by the Clearing House or any Receiver may be exercised or made in its absolute and unfettered discretion without any obligation to give reasons.

20. **No liability**

Neither the Clearing House nor any receiver appointed pursuant to this Deed shall be liable by reason of: (a) taking any action permitted by this Deed; or (b) any neglect or default in connection with the Charged Property; or (c) the taking possession or realisation of all or any part of the Charged Property, except in the case of gross negligence or wilful default upon its part.

21. **Remedies, Time or Indulgence**

- (1) The rights, powers and remedies provided by this Deed are cumulative and are not, nor are they to be construed as, exclusive of any right of set-off or other rights, powers and remedies provided by law.
- (2) The obligations of the Chargor under this Deed shall not be affected by any act, omission or circumstance which, but for this provision, might operate to release or otherwise exonerate the Chargor from its obligations under this Deed or affect such obligations including (without limitation and whether or not known to the Chargor or the Clearing House):
 - (a) any unenforceability, illegality, invalidity or non-provability of any obligation of the Chargor or any other person; or
 - (b) any incapacity or lack of power, authority or legal personality or dissolution or change in the members or status of the Chargor or any other person.
- (3) No failure on the part of the Clearing House to exercise, or delay on its part in exercising, any of the rights, powers and remedies provided by this Deed or by law (collectively "**the Clearing House's Rights**") shall operate as a waiver thereof, nor shall any single or partial waiver of any of the Clearing House's Rights preclude any further or other exercise of that or any other of the Clearing House's Rights.
- (4) The Clearing House may in its discretion grant time or other indulgence or make any other arrangement, variation or release with any person not party hereto (irrespective of whether such person is liable with the Chargor) in respect of the Secured Obligations or in any way affecting or concerning them or any of them or in respect of any security for the Secured Obligations or any of them, without in any such case prejudicing, affecting or impairing the security hereby constituted, or any of the Clearing House's Rights or the exercise of the same, or any indebtedness or other liability of the Chargor to the Clearing House.

22. **Costs, Charges and Expenses**

All costs, charges and expenses of the Clearing House incurred in the exercise of any of the Clearing House's Rights, or in connection with the execution of or otherwise in relation to this Deed or in connection with the perfection or enforcement of all security hereby constituted shall be reimbursed to the Clearing House by the Chargor on demand on a full indemnity basis together with interest from the date of the same having been incurred to the date of payment at the rate referred to in Clause 1A(2) above.

23. **Accounts**

All monies received, recovered or realised by the Clearing House under this Deed (including the proceeds of any conversion of currency) may in the discretion of the Clearing House be credited to any suspense or impersonal account and may be held in such account for so long as the Clearing House shall think fit (with interest accruing thereon at such rate, if any, as the Clearing House may deem fit) pending their application from time to time (as the Clearing House shall be entitled to do in its discretion) in or towards the discharge of any of the Secured Obligations.

24. **Currency**

- (1) For the purpose of or pending the discharge of any of the Secured Obligations the Clearing House may convert any monies received, recovered or realised or subject to application by the Clearing House under this Deed (including the proceeds of any previous conversion under this Clause) from their existing currency of denomination into such other currency of denomination as the Clearing House may think fit, and any such conversion shall be effected at such commercial spot selling rate of exchange then prevailing for such other currency against the existing currency as the Clearing House may in its discretion determine.
- (2) References herein to any currency extend to any funds of that currency and for the avoidance of doubt funds of one currency may be converted into different funds of the same currency.

25. **Notices**

- (1) Any notice or demand (including any Default Notice) requiring to be served on the Chargor by the Clearing House hereunder may be served on any of the officers of the Chargor personally, or by letter addressed to the Chargor or to any of its officers and left at its registered office or any one of its principal places of business, or by posting the same by letter addressed in any such manner as aforesaid to such registered office or any such principal place of business.
- (2) Any notice or demand (including any Default Notice) sent by post in accordance with sub-paragraph (1) of this Clause shall be deemed to have been served on the Chargor at 10 a.m. Greenwich Mean Time on the business day next following the date of posting. In proving such service by post it shall be sufficient to show that the letter containing the notice or demand (including any Default Notice) was properly addressed and posted and such proof of service shall be effective notwithstanding that the letter was in fact not delivered or was returned undelivered.

26. **Provisions Severable**

Each of the provisions contained in this Deed shall be severable and distinct from one another and if at any time any one or more of such provisions is or becomes invalid, illegal or unenforceable, the validity, legality and enforceability of each of the remaining provisions of this Deed shall not in any way be affected, prejudiced or impaired thereby.

27. **Clearing House's Discretions**

Any liberty or power which may be exercised or any determination which may be made hereunder by the Clearing House may (save where stated to the contrary) be exercised or made in the absolute and unfettered discretion of the Clearing House which shall not be under any obligation to give reasons thereof.

28. **Third Party Rights**

A person who is not a party to this Deed has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce or to enjoy the benefit of any term of this Deed.

29. **Law and Jurisdiction**

This Deed, and any non-contractual obligations arising herefrom, shall be governed by and construed in accordance with English law, and the Chargor hereby irrevocably submits to the non-exclusive jurisdiction of the English courts; provided that with respect to issues arising as a result of the provisions of Clause 10(1) above or the use of this Deed as a security agreement as provided therein, this Deed shall be governed by and construed in accordance with applicable laws of the State of New York.

The Chargor

Executed as a **DEED** by

The Chargor

[CHARGOR NAME]

.....
Signature of Director

.....
Name of Director

.....
Date

.....
Signature of Director/Secretary

.....
Name of Director/Secretary

.....
Date

The Clearing House

LCH.Clearnet Limited

.....
Signature of Authorised Signatory

.....
Name of Authorised Signatory

.....
Title of Authorised Signatory

.....
Date

.....
Signature of Authorised Signatory

.....
Name of Authorised Signatory

.....
Title of Authorised Signatory

.....
Date

Dated _____

and

LCH.CLEARNET LIMITED

**CHARGE BY CLEARING MEMBER
SECURING OWN OBLIGATIONS**

Annex 3
Security Deed

SECURITY DEED

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THIS SECURITY DEED is dated [*Insert Date of Execution*] and made by way of deed poll by [CLEARING MEMBER] in its capacity as chargor (the "**Chargor**").

WHEREAS:

- (A) In order to facilitate the clearing of certain transactions with LCH.Clearnet Limited (the "**Clearing House**"), the Chargor has entered into one or more agreements with one or more of its clients and may enter into further agreements with such clients and/or one or more agreements with further clients, in each case that govern the terms upon which the Chargor will act as Clearing Member in respect of Client Clearing Business of that client (each such agreement, together with any related collateral, security or margining agreement, a "**Clearing Agreement**").
- (B) The Chargor is executing this Security Deed in order to maximise the ability to move positions corresponding to transactions under the Clearing Agreements to Backup Clearing Members upon the occurrence of an Enforcement Event or to provide for certain receivables to be delivered from the Clearing House to the Clients directly.

It is agreed as follows:

1. **DEFINITIONS AND INTERPRETATION**

1.1 **Definitions:**

Capitalised terms used but not defined in this Security Deed including in the Recitals shall have the meaning given to them in the LCH Rules. In addition, the following expressions shall have the following meanings:

"**Associated LCH Transactions**" means, in respect of a Client, the Contracts entered into by the Chargor with the Clearing House on behalf of such Client.

"**Authorisation Date**" means the date falling 6 months after 25 October 2013, unless the Clearing House notifies the Chargor that the Authorisation Date will be a date (the "**New Authorisation Date**") other than the then current Authorisation Date, in which case the Authorisation Date will be such New Authorisation Date. For the avoidance of doubt multiple notifications may be made and the New Authorisation Date specified in the last such notification will be the Authorisation Date.

"**Charge**" means the security interest created or expressed to be created by this Security Deed.

"**Charged Assets**" means the assets subject, or expressed to be subject, to the Charge or any part of those assets.

"**Clearing Agreement**" has the meaning ascribed to such term in Recital (A) to this Security Deed.

"**Clearing Default**" means the Chargor becoming a defaulter for the purposes of Rule 4 of the LCH Default Rules.

"**Clearing House**" has the meaning ascribed to such term in Recital (A) to this Security Deed.

"**Client**" means each of the clients listed in Schedule 2 to this Security Deed being, in each case, a Clearing Client who is party to a Clearing Agreement. For the avoidance of doubt, an individual Clearing Client may be party to more than one Clearing Agreement with the Chargor (due to such Clearing Client (i) receiving Client Clearing Services from the Chargor in respect or more than one Service and/or (ii) being a Clearing Client in respect of whom the Chargor has opened more than one Client Account relating to a Relevant Client Clearing Business), and in each such capacity the relevant Clearing Client will constitute a separate "Client" for the purposes of this Security Deed and will be separately identified (including with details of the relevant Service and details of the LCH identifier for the relevant Client Account) in Schedule 2 to this Security Deed.

"**Effective Date**" means the Authorisation Date or the date of this Security Deed, whichever is later.

"**Enforcement Event**" means the occurrence of a Clearing Default in relation to the Chargor in accordance with the LCH Rules.

"**Insolvency Act**" means the Insolvency Act 1986.

"**LCH Rules**" means the rules, regulations, procedures or agreements (including the LCH General Regulations and the LCH Default Rules), applicable to the Chargor and/or Associated LCH Transactions, in each case as published by the Clearing House and as the same may be amended from time to time.

"**Liabilities**" means all present and future obligations, moneys, debts and liabilities due, owing or incurred by the Chargor to a Client under or in connection with the Transaction Documents.

"**LPA**" means the Law of Property Act 1925.

"**Relevant Account Property**" means, in respect of a Client, the Account Balance relating to such Client, as determined by the Clearing House in accordance with the LCH Rules following an Enforcement Event.

"**Relevant Clearing Agreement**" means, in relation to a Client, the Clearing Agreement to which such Client is a party.

"**Relevant Client Clearing Return**" means, in respect of a Client, the Client Clearing Entitlement relating to such Client, as determined by the Clearing House in accordance with the LCH Rules following an Enforcement Event.

"**Security**" means a mortgage, charge, pledge, lien or other security interest securing any obligation of any person or any other agreement or arrangement having a similar effect.

"Transaction Documents" means this Security Deed and the Relevant Clearing Agreement.

1.2 **Construction:**

1.2.1 Unless a contrary indication appears, any reference in this Security Deed to:

- (a) **"assets"** includes present and future properties, revenues and rights of every description;
- (b) the **"Chargor"**, a **"Client"** or any **"party"** shall be construed so as to include its successors in title and permitted transferees;
- (c) an agreement, confirmation or instrument is to a reference to that agreement or instrument as amended, novated, supplemented, extended, restated (however fundamentally and whether or not more onerous) or replaced;
- (d) a **"person"** includes any individual, firm, company, corporation, government, state or agency of a state or any association, trust, joint venture, consortium or partnership (whether or not having separate legal personality);
- (e) a **"regulation"** includes any regulation, rule, official directive, request or guideline (whether or not having the force of law) of any governmental, intergovernmental or supranational body, agency, department or of any regulatory, self-regulatory or other authority or organisation;
- (f) the singular includes the plural and vice versa; and
- (g) a provision of law is a reference to that provision as amended or re-enacted.

1.2.2 Clause and Schedule headings are for ease of reference only.

2. **UNDERTAKING TO PAY**

The Chargor undertakes to pay each of its Liabilities when due in accordance with its terms.

3. **SECURITY**

With effect from the Effective Date, the Chargor, with full title guarantee and as security for the payment of all Liabilities, charges absolutely in favour of each Client all its present and future right, title and interest in and to the Relevant Client Clearing Return and the Relevant Account Property.

4. MULTIPLE DEEDS

This Security Deed shall be treated as if it were a separate deed in favour of each of the Clients listed in Schedule 2 to this Security Deed, as if the Chargor had executed a separate deed in favour of each such Client so that this Security Deed confers rights severally in favour of each Client.

5. RESTRICTIONS AND FURTHER ASSURANCE

5.1 Security

The Chargor agrees that it shall not create or permit to subsist any Security over any Charged Assets except for the Charge.

5.2 Distribution of Charged Property

The Chargor hereby acknowledges and agrees that, following the occurrence of a Clearing Default, the Clearing House shall act in accordance with the LCH Rules and any other laws and regulations applicable to it in determining how the Charged Assets are to be distributed and that such action by the Clearing House shall be without prejudice to any protections afforded to it pursuant to the LCH Rules and any such other laws and regulations.

5.3 Margining

The Chargor agrees that, prior to the operation of Clause 13.1, it shall provide margin in respect of any Associated LCH Transactions to the Clearing House on an Individual Segregated Account basis or an Omnibus Segregated Account basis (as may be agreed between the Chargor and the relevant Client) in accordance with the LCH Rules.

6. PAYMENTS

6.1 No Enforcement Event

Subject as otherwise provided in this Security Deed, and for so long as no Enforcement Event has occurred, the Chargor shall be entitled to receive and retain all payments or transfers made to it in respect of the relevant Client Account in accordance with the LCH Rules. For the avoidance of doubt, the Chargor shall not be entitled to deal with the Charged Assets at any time while the Charge is in effect.

6.2 Post Enforcement Event

Following the occurrence of an Enforcement Event, the Client shall be entitled to receive directly from the Clearing House all Charged Assets and payments or transfers made in respect of a Charged Asset.

7. ENFORCEMENT AND REMEDIES

7.1 Enforcement Event

The Security created on the Effective Date shall only be enforceable, and the powers conferred by Section 101 of the LPA as varied and extended by this Security Deed shall only be exercisable, following the occurrence of an Enforcement Event.

7.2 Power of Sale

The statutory power of sale and the other statutory powers conferred on mortgagees by Section 101 of the LPA as varied and extended by this Security Deed shall arise on the Effective Date of this Security Deed.

7.3 Section 103 LPA

Section 103 of the LPA shall not apply to this Security Deed.

8. PROVISIONS RELATING TO CLIENT

8.1 Client's Rights

At any time after the occurrence of an Enforcement Event, the Client shall have the rights set out in the Schedule hereto.

8.2 Application of Proceeds

Subject to Clause 13.1, all amounts or assets received or recovered by the Client in the exercise of its rights under this Security Deed shall be applied in the following order: (i) in or towards the payment of the Liabilities in such order as the Client thinks fit, but in any case acting in good faith and in a commercially reasonable manner, and (ii) in payment of any surplus to the Chargor.

8.3 Power of Attorney

The Chargor by way of security irrevocably appoints the Client as its attorney (with full power of substitution), on its behalf and in its name or otherwise, in such manner as the attorney thinks fit, but in any case acting in good faith and in a commercially reasonable manner, to exercise (following the occurrence of an Enforcement Event only) any of the rights conferred on the Client in relation to the Charged Assets or under the LPA or the Insolvency Act. The Chargor ratifies and confirms and agrees to ratify and confirm whatever any such attorney shall do in the exercise or purported exercise of the power of attorney granted by it in this Clause 8.3.

9. NOTIFICATION OF NEW AUTHORISATION DATE

- 9.1 The Chargor agrees that the Clearing House may notify the Chargor of a New Authorisation Date by publishing a notification on the Clearing House's website.
- 9.2 The Chargor agrees that notice of a New Authorisation Date will be deemed to have been delivered to the Chargor upon the publication of a notice of such New Authorisation Date on the Clearing House's website.

10. AMENDMENTS TO THE SECURITY DEED

The Chargor may from time to time amend or revoke the terms of this Security Deed without the Client's consent, provided, however, that the Chargor undertakes:

- 10.1 not to amend or revoke this Security Deed without the prior written consent of the Clearing House; and
- 10.2 to amend this Security Deed from time to time in order to reflect such changes as may be prescribed by the Clearing House to the "Security Deed" (as defined in the LCH Rules, and upon which this Security Deed is based) from time to time in accordance with the LCH Rules.

11. ADDITIONAL CLIENTS

The Chargor may, after the date of this Security Deed, grant a charge on the terms of this Security Deed to one or more additional clients. On each occasion when the Chargor wishes to exercise this right, it will execute a further security deed substantially in the form set out in Schedule 3 to this Security Deed (an "**Additional Security Deed**") and will deliver to the Clearing House a copy of such Additional Security Deed, including an annex which sets out the details of the relevant client(s). For the avoidance of doubt, an Additional Security Deed may be given in respect of one or more clients.

12. SAVING PROVISIONS

12.1 **Continuing Security**

Subject to Clause 13, the Charge is continuing security and will extend to the ultimate balance of the Liabilities, regardless of any intermediate payment or discharge in whole or in part.

12.2 **Reinstatement**

If any discharge, release or arrangement (whether in respect of the obligations of the Chargor or any security for those obligations or otherwise) is made by the Client in whole or in part on the basis of any payment, security or other disposition which is avoided or must be restored in insolvency, liquidation or otherwise, without limitation, then the liability of the Chargor and the Charge shall continue or be reinstated as if the discharge, release or arrangement had not occurred.

12.3 Waiver of Defences

Neither the obligations of the Chargor under this Security Deed nor the Charge will be affected by an act, omission, matter or thing which, but for this Clause 12.3, would reduce, release or prejudice any of its obligations under any Transaction Document or the Charge (without limitation and whether or not known to the Chargor or the Client) including:

- 12.3.1 any time, waiver or consent granted to, or composition with, the Chargor or other person;
- 12.3.2 the release of the Chargor or any other person under the terms of any composition or arrangement with any creditor of any affiliate;
- 12.3.3 the taking, variation, compromise, exchange, renewal or release of, or refusal or neglect to perfect, take up or enforce, any rights against, or security over assets of, the Chargor or other person or any non-presentation or non-observance of any formality or other requirement in respect of any instrument or any failure to realise the full value of any security;
- 12.3.4 any amendment, novation, supplement, extension, restatement (however fundamental and whether or not more onerous) or replacement of any Transaction Document or any other document or security; or
- 12.3.5 any insolvency or similar proceedings.

12.4 Immediate Recourse

The Chargor waives any right it may have of first requiring the Client (or any trustee or agent on its behalf) to proceed against or enforce any other rights or security or claim payment from any person before claiming from the Chargor under this Security Deed. This waiver applies irrespective of any law or any provision of a Transaction Document to the contrary.

12.5 Additional Security

The Charge is in addition to and is not in any way prejudiced by any other guarantees or security now or subsequently held by the Client.

13. DISCHARGE OF SECURITY

13.1 Final Redemption

Immediately upon there no longer being any Liabilities remaining (or, if earlier, immediately upon it no longer being possible for an Enforcement Event to occur), the Client shall be deemed to have immediately released, reassigned or discharged (as appropriate) the Charged Assets from the Charge and therefore:

- 13.1.1 the Chargor may retain for its own account; and

13.1.2 the Client shall therefore promptly pay or transfer to the Chargor,

any amounts or other assets received by such party from the Clearing House in respect of the Charged Assets. For the avoidance of doubt, it is acknowledged that the Chargor's rights under this Clause 13 shall constitute an equity of redemption (and therefore a proprietary interest to the extent of such equity of redemption) in the Charged Assets and any amounts or other assets the subject of such rights shall be returned by the Client to the Chargor.

13.2 **Consolidation**

Section 93 of the LPA shall not apply to the Charge.

14. MISCELLANEOUS PROVISIONS

14.1 **Payments**

All payments by the Chargor under this Security Deed (including damages for its breach) shall be made to such account, with such financial institution and in such other manner as the Client may direct.

14.2 **Remedies and Waivers**

No failure to exercise, nor any delay in exercising, on the part of the Client any right or remedy under this Security Deed shall operate as a waiver, nor shall any single or partial exercise of any right or remedy prevent any further or other exercise or the exercise of any other right or remedy. The rights and remedies provided in this Security Deed are cumulative and not exclusive of any rights or remedies provided by law.

14.3 **Partial Invalidity**

If, at any time, any provision of this Security Deed is or becomes illegal, invalid or unenforceable in any respect under any law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions nor the legality, validity or enforceability of such provision under the law of any other jurisdiction will in any way be affected or impaired.

14.4 **Governing Law**

This Security Deed and any non-contractual obligations arising out of or in connection with it are governed by English law.

14.5 **Jurisdiction**

In relation to any proceedings, each party to this Security Deed irrevocably submits to the exclusive jurisdiction of the courts of England and waives any objection to proceedings in such courts on the grounds of venue or on the grounds that the proceedings have been brought in an inconvenient forum. Each such submission is made for the benefit of the other party and shall not affect the right of any party to

take proceedings in any other court of competent jurisdiction nor shall the taking of proceedings in any court of competent jurisdiction preclude any party from taking proceedings in any other court of competent jurisdiction (whether concurrently or not) unless precluded by law.

14.6 **[Agent for Service of Process; Chargor**

The Chargor hereby irrevocably appoints [Name of Agent] of [Address in England] to receive service of process on its behalf as its authorised agent for service of process in England. If for any reason such agent ceases to be such agent for service of process, the Chargor shall forthwith appoint a new agent for service of process in England. Nothing in this Security Deed shall affect the right to serve process in any other matter permitted by law.]

This Security Deed has been delivered on the date stated at the beginning of this Security Deed.

[CHARGOR]

[INSERT APPROPRIATE SIGNATURE BLOCK]

SCHEDULE 1 RIGHTS OF CLIENT

Following the occurrence of an Enforcement Event, the Client shall have the right, either in its own name or in the name of the Chargor or otherwise and in such manner and upon such terms and conditions as the Client thinks fit, but in any case, acting in good faith and in a commercially reasonable manner, and either alone or jointly with any other person:

1. **Take possession:** to take possession of, get in and collect the Charged Assets and to require payment to it of revenues deriving therefrom;
2. **Deal with Charged Assets:** to sell, transfer, assign, exchange or otherwise dispose of or realise the Charged Assets to any person either by public offer or auction, tender or private contract and for a consideration of any kind (which may be payable or delivered in one amount or by instalments spread over a period or deferred);
3. **Borrow money:** to borrow or raise money either unsecured or on the security of the Charged Assets (either in priority to the Charge or otherwise);
4. **Rights of ownership:** to manage and use the Charged Assets and to exercise and do (or permit the Chargor or any nominee of it to exercise and do) all such rights and things as the Client would be capable of exercising or doing if it were the absolute beneficial owner of the Charged Assets;
5. **Claims:** to settle, adjust, refer to arbitration, compromise and arrange any claims, accounts, disputes, questions and demands with or by any person relating to the Charged Assets;
6. **Legal actions:** to bring, prosecute, enforce, defend and abandon actions, suits and proceedings in relation to the Charged Assets;
7. **Redemption of Security:** to redeem any Security (whether or not having priority to the Charge) over the Charged Assets and to settle the accounts of any person with an interest in the Charged Assets; and
8. **Other powers:** to do anything else it may think fit for the realisation of the Charged Assets or incidental to the exercise of any of the rights conferred on the Client under or by virtue of any Transaction Document, the LPA or the Insolvency Act.

SCHEDULE 3 ADDITIONAL SECURITY DEED

THIS SECURITY DEED is dated [*Insert Date of Execution*] and made by way of deed poll by [CLEARING MEMBER] in its capacity as chargor (the "**Chargor**").

WHEREAS:

- (A) In order to facilitate the clearing of certain transactions with LCH.Clearnet Limited (the "**Clearing House**"), the Chargor has entered into one or more agreements with one or more clients (each such agreement, a "**Clearing Agreement**").
- (B) The Chargor has previously entered by deed poll into a security deed dated [.] in favour of certain of its clearing clients (such security deed as amended from time to time, after as well as before the date of this Security Deed, the "**Original Security Deed**").
- (C) The Chargor is executing this Security Deed in order to maximise the ability of one or more additional Client(s) to move positions corresponding to transactions under the Clearing Agreements to Backup Clearing Members upon the occurrence of an Enforcement Event or to provide for certain receivables to be delivered from the Clearing House to the Clients directly.

It is agreed as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions:

- (a) For the purposes of this Security Deed, the following defined terms shall have the following meanings:

"**Client**" means each of the additional client(s) listed in the Annex to this Security Deed. For the avoidance of doubt, an individual Clearing Client may be party to more than one Clearing Agreement with the Chargor (due to such Clearing Client (i) receiving Client Clearing Services from the Chargor in respect or more than one Service and/or (ii) being a Clearing Client in respect of whom the Chargor has opened more than one Client Account relating to a Relevant Client Clearing Business), and in each such capacity the relevant Clearing Client will constitute a separate "Client" for the purposes of this Security Deed (save where the relevant Clearing Client in the relevant capacity is already a client for the purposes of the Original Security Deed or a another security deed entered into prior to the date of this Security Deed on substantially the same terms as this Security Deed) and will be separately identified (including with details of the relevant Service and details of the LCH identifier for the relevant Client Account) in the Annex to this Security Deed.

"**Effective Date**" means the Authorisation Date or the date of this Security Deed, whichever is later;

- (b) Capitalised terms used but not defined in this Security Deed including in the Recitals shall have the meaning given to them in the Original Security Deed.

1.2 Construction:

- (a) Unless a contrary indication appears, any reference in this Security Deed to:
 - (i) "**assets**" includes present and future properties, revenues and rights of every description;
 - (ii) the "**Chargor**", a "**Client**" or any "**party**" shall be construed so as to include its successors in title and permitted transferees;
 - (iii) an agreement, confirmation or instrument is to a reference to that agreement or instrument as amended, novated, supplemented, extended, restated (however fundamentally and whether or not more onerous) or replaced;
 - (iv) a "**person**" includes any individual, firm, company, corporation, government, state or agency of a state or any association, trust, joint venture, consortium or partnership (whether or not having separate legal personality);
 - (v) a "**regulation**" includes any regulation, rule, official directive, request or guideline (whether or not having the force of law) of any governmental, intergovernmental or supranational body, agency, department or of any regulatory, self-regulatory or other authority or organisation;
 - (vi) the singular includes the plural and vice versa; and
 - (vii) a provision of law is a reference to that provision as amended or re-enacted.
- (b) Clause and Schedule headings are for ease of reference only.

2. OPERATIVE PROVISIONS

With effect from the Effective Date, this Security Deed is entered into on the same terms as the Original Security Deed, and each Client listed in the Annex to this Security Deed shall have the same rights and protections (subject to the same conditions and qualifications) as a "Client" under the Original Security Deed.

3. MULTIPLE DEEDS

The Chargor agrees that, where there is more than one Client listed in the Annex to this Security Deed, this Security Deed shall be treated as if it were a separate deed in favour of each such Client, as if the Chargor had executed a separate deed in favour of each such Client.

This Security Deed has been delivered on the date stated at the beginning of this Security Deed.

[CHARGOR]

[INSERT APPROPRIATE SIGNATURE BLOCK]

